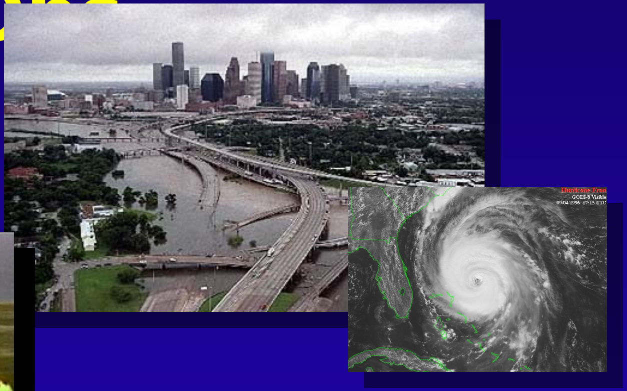
R&D
Leaders Emeritus Brief

Dr. Barbara Sotirin

Deputy Director, Research & Development

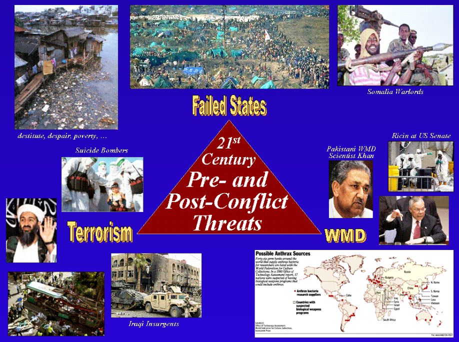
Areas of Interest

- **Hurricane/Emergency Ops**


Hurricane Fran
GOES 8 Visible
09/04/1996 17:15 UTC

- Force Protection

- Regional Stability

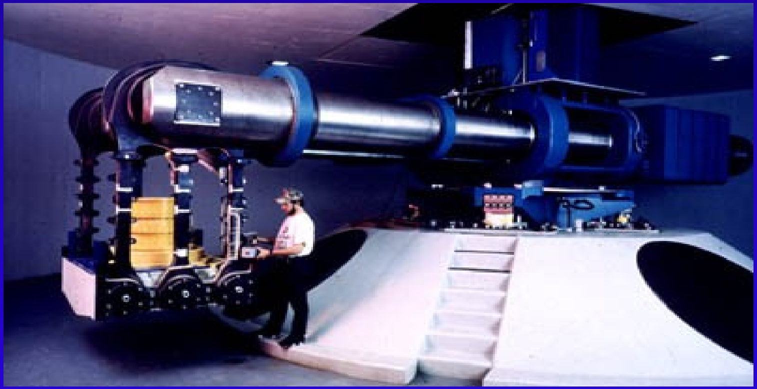

Failed States
destitute, despair, poverty, …
Somalia Warlords
21st Century Pre- and Post-Conflict Threats
Suicide Bombers
Terrorism
Iraqi Insurgents
Pakistani WMD Scientist Khan
Ricin at US Senate
WMD
Possible Anthrax Sources

Emergency Operations

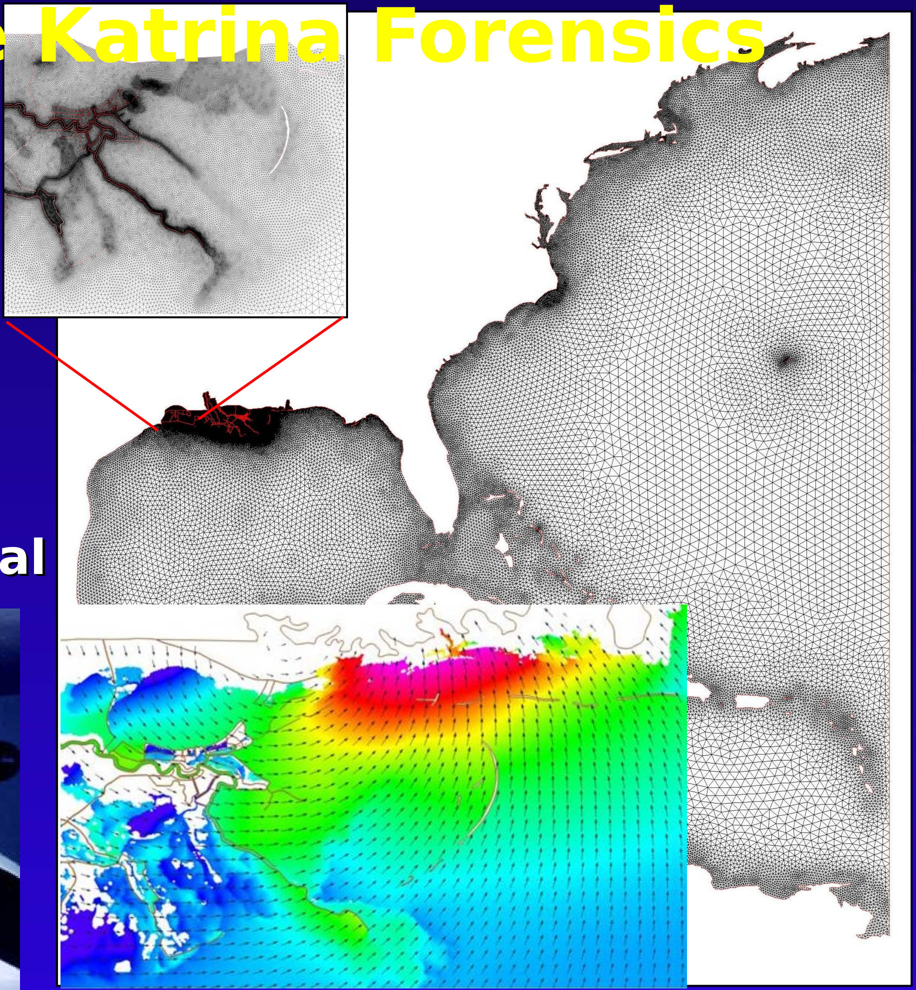
$C

Flood and Coastal Damage Reduction
Hurricane Katrina Forensics

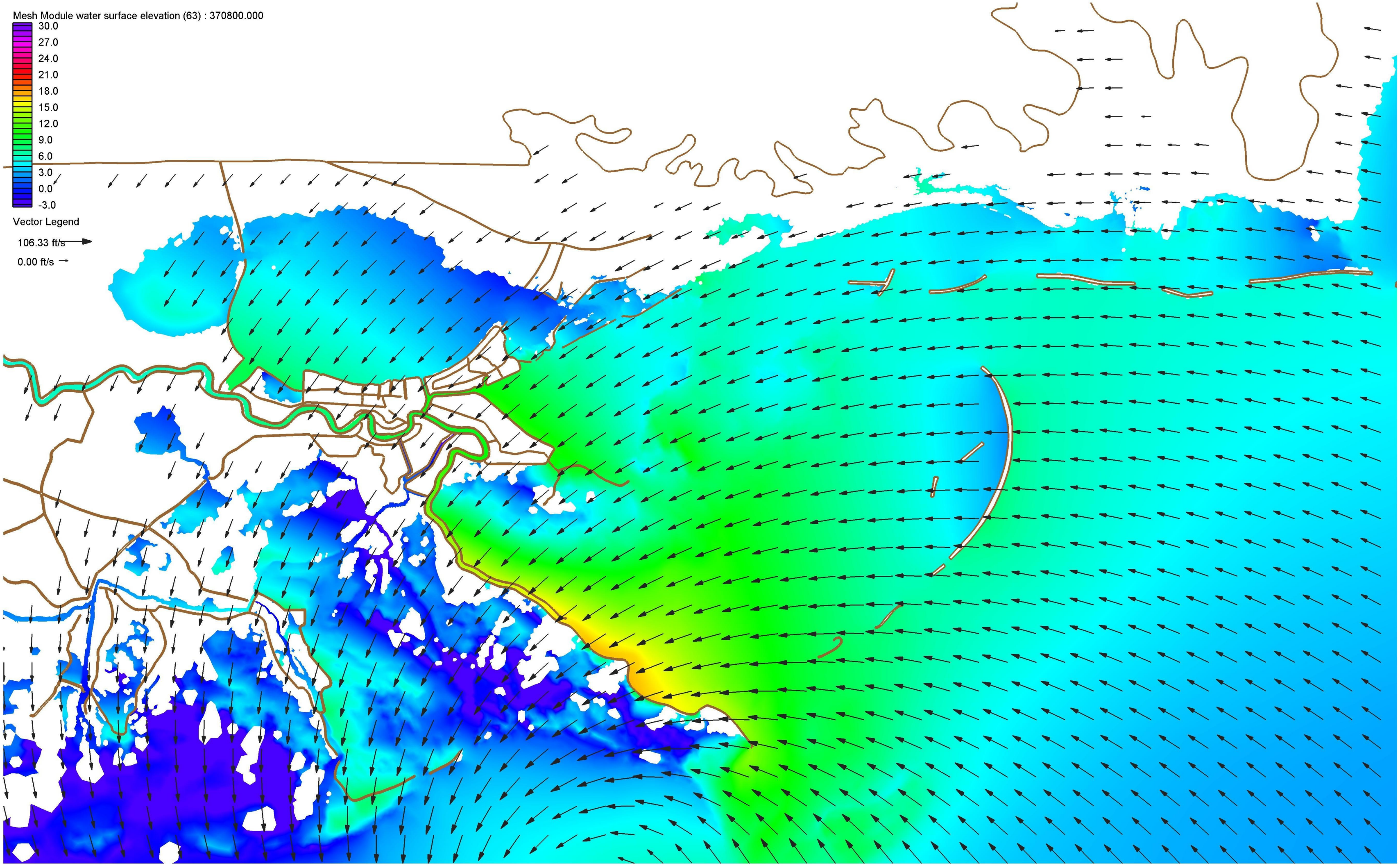
Hydraulic Model of 17th Street Canal



World’s largest centrifuge geotechnical investigations



Numerical Model Simulations of Katrina Surge and Waves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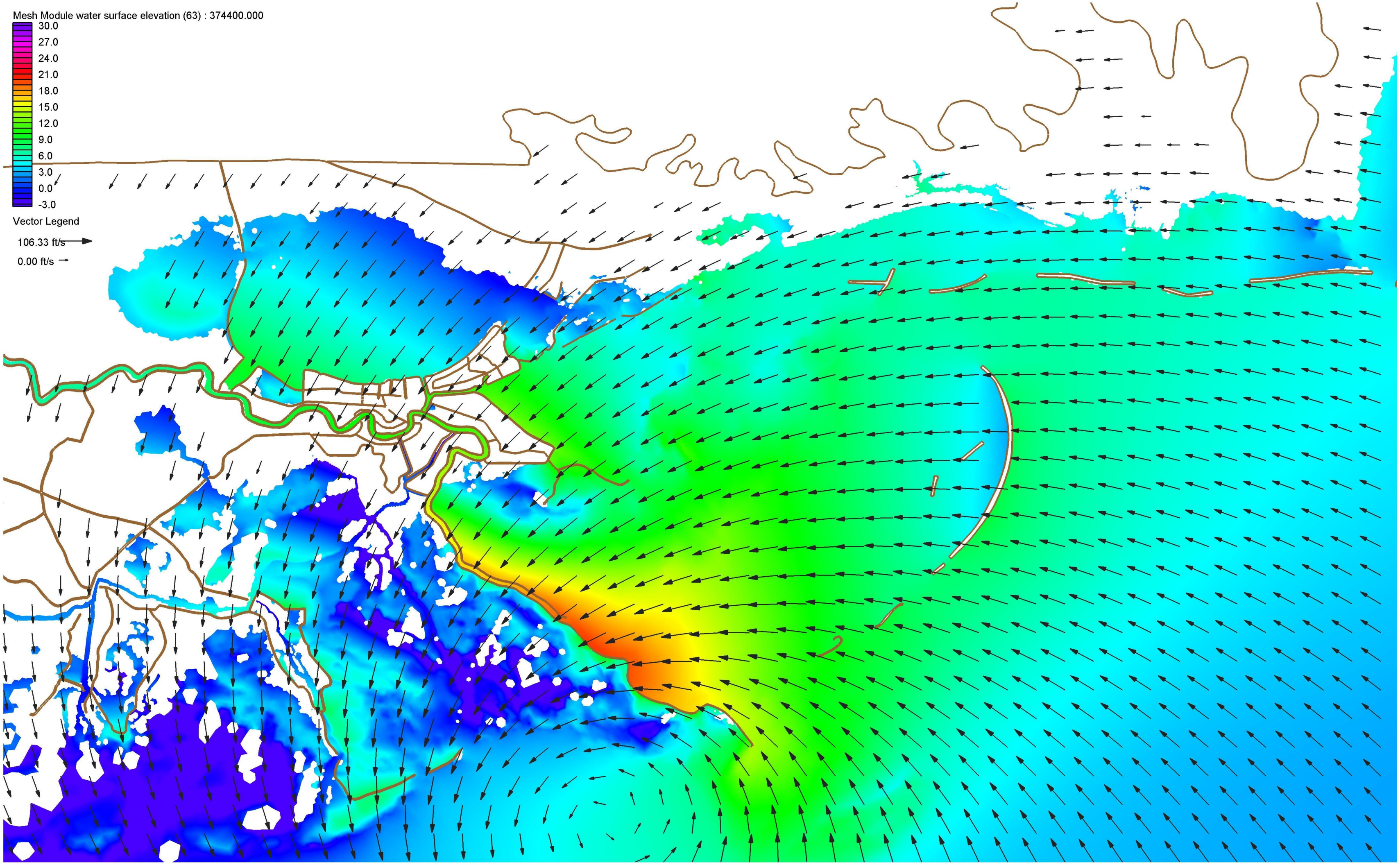
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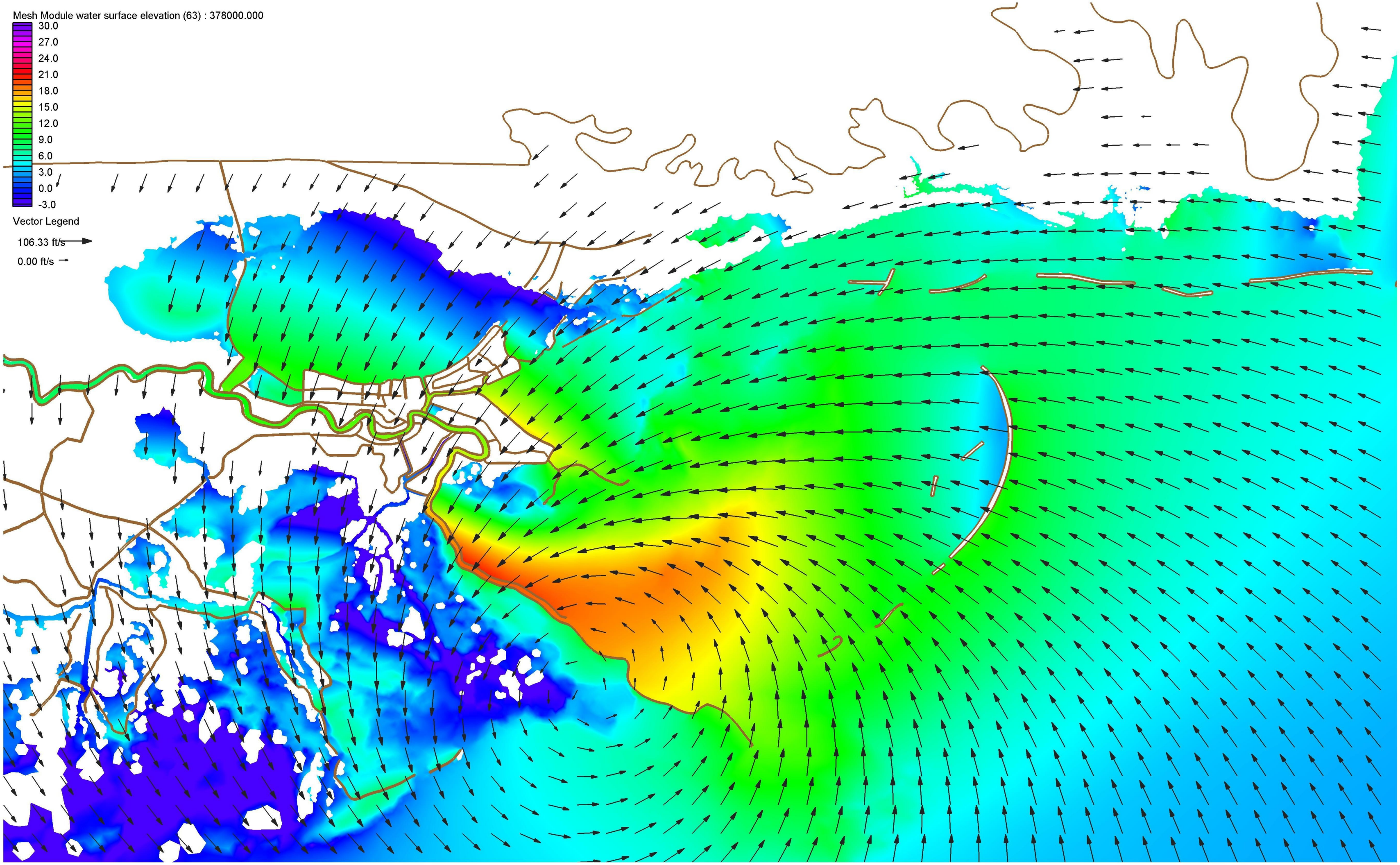
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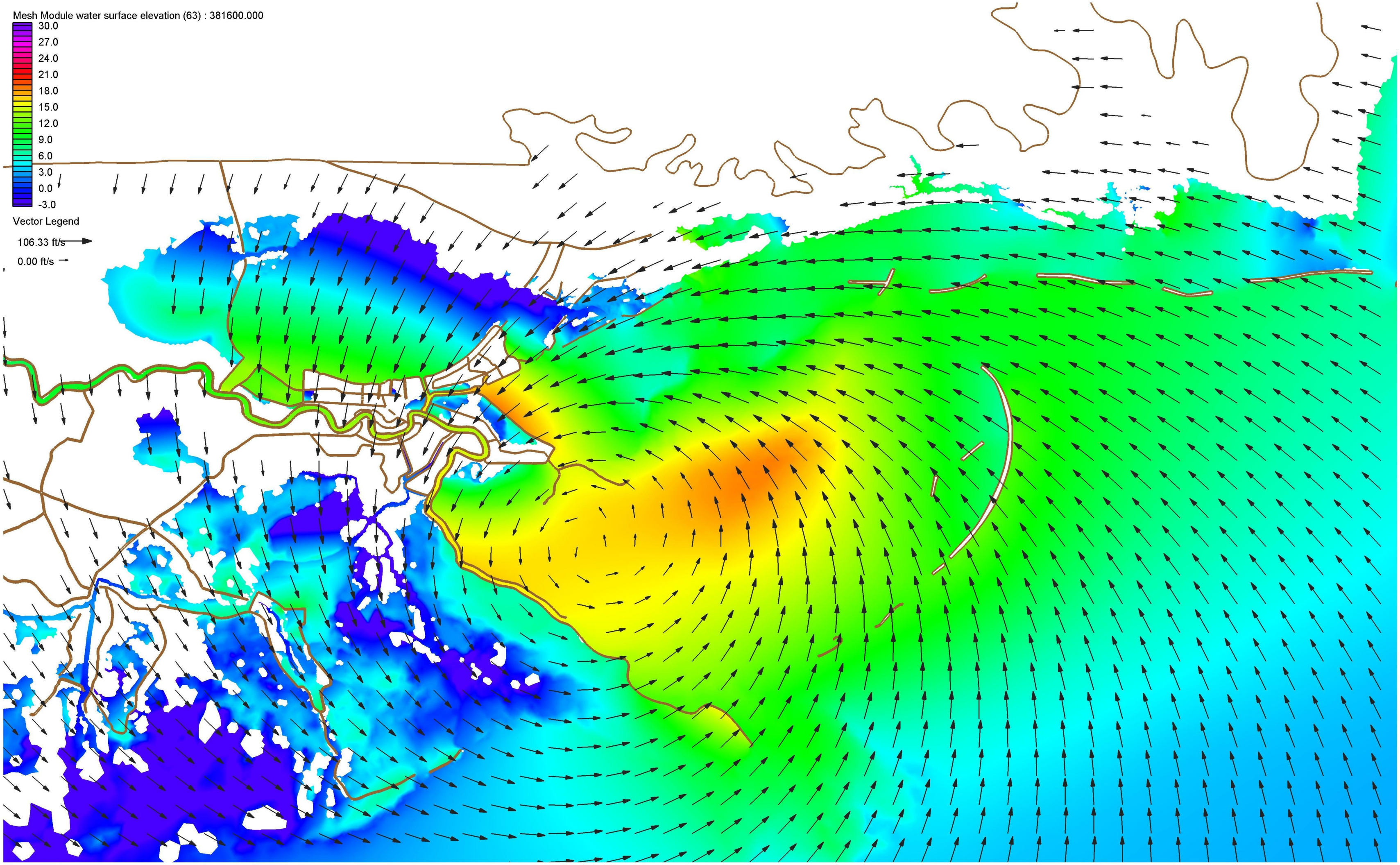
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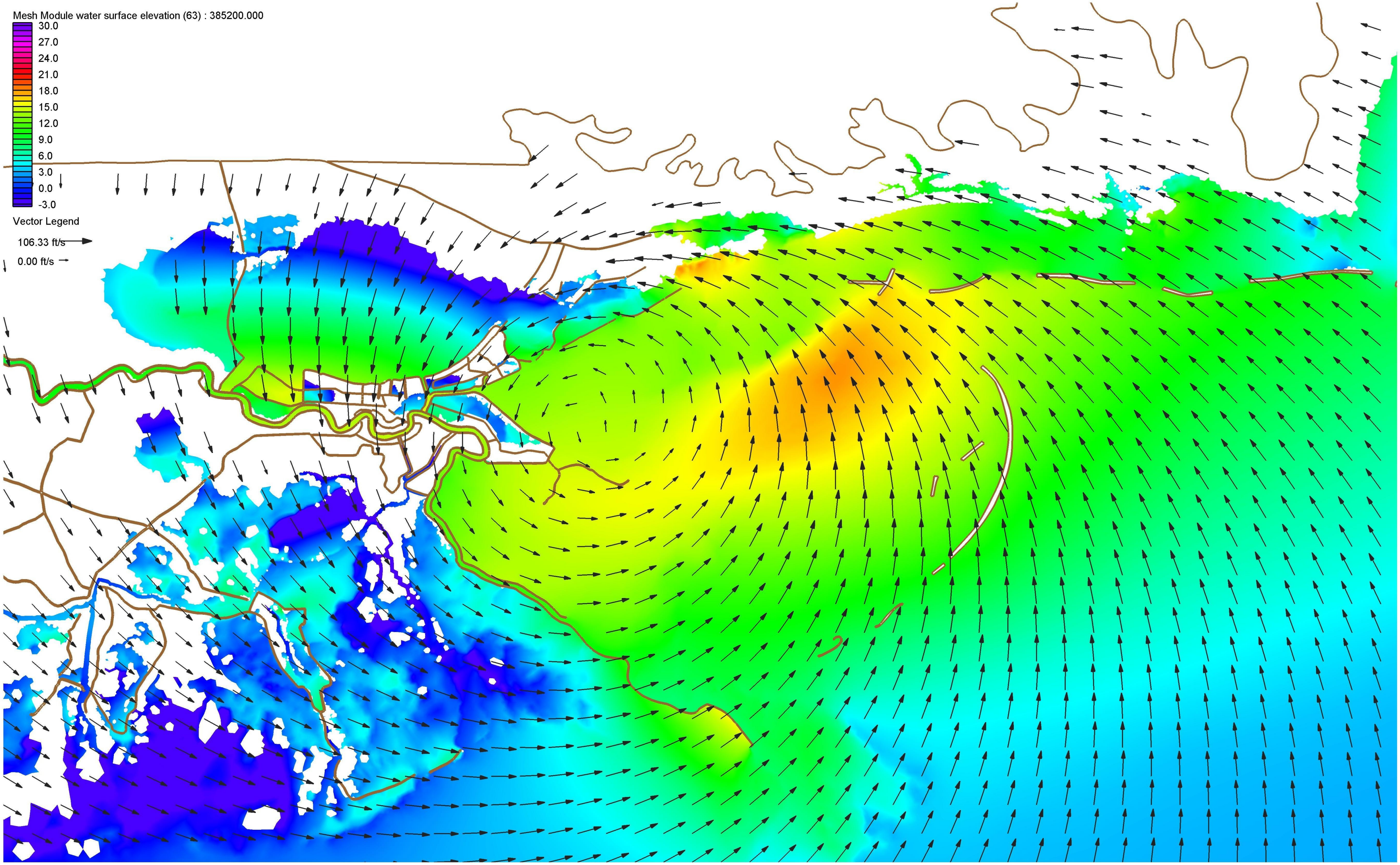
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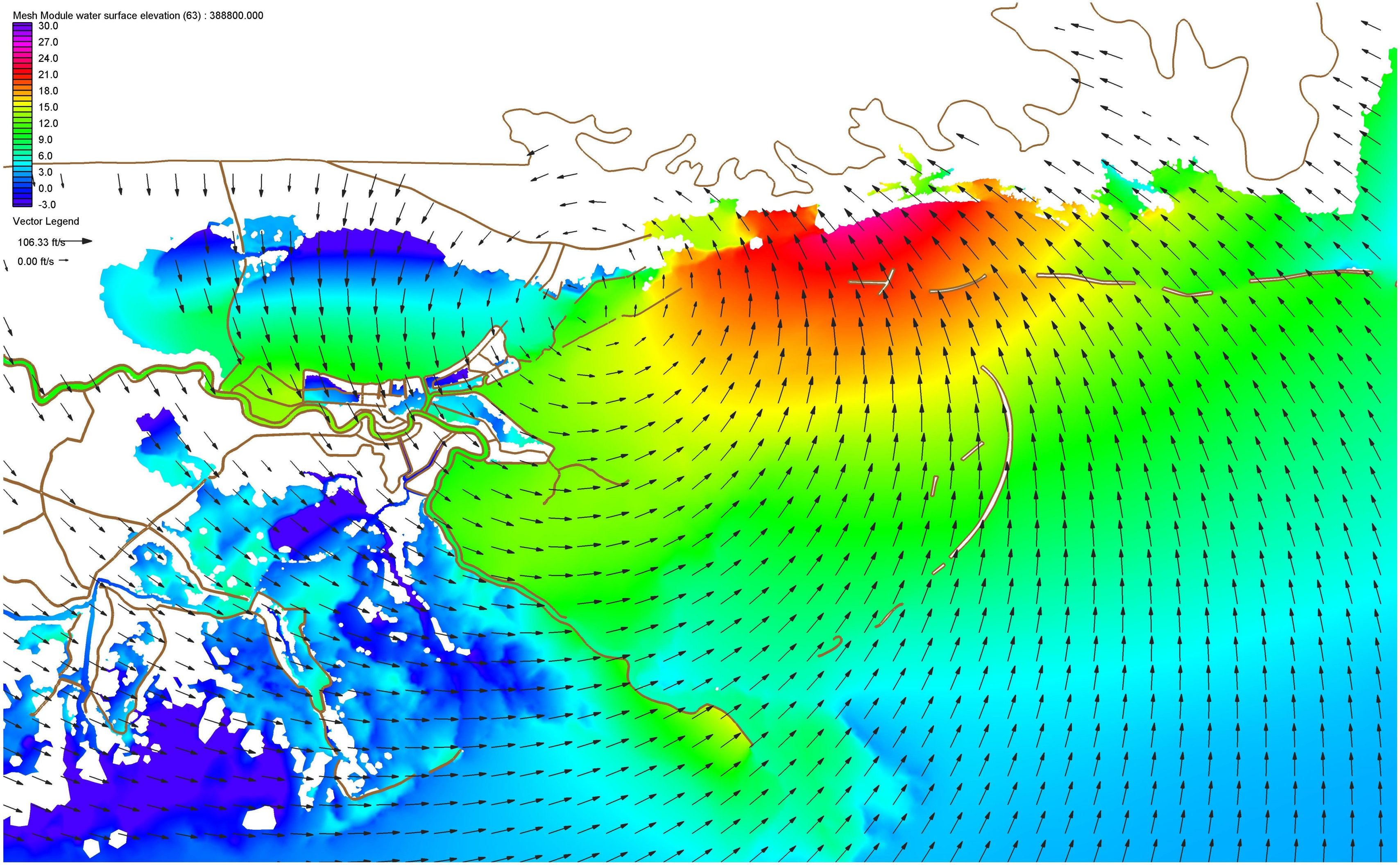
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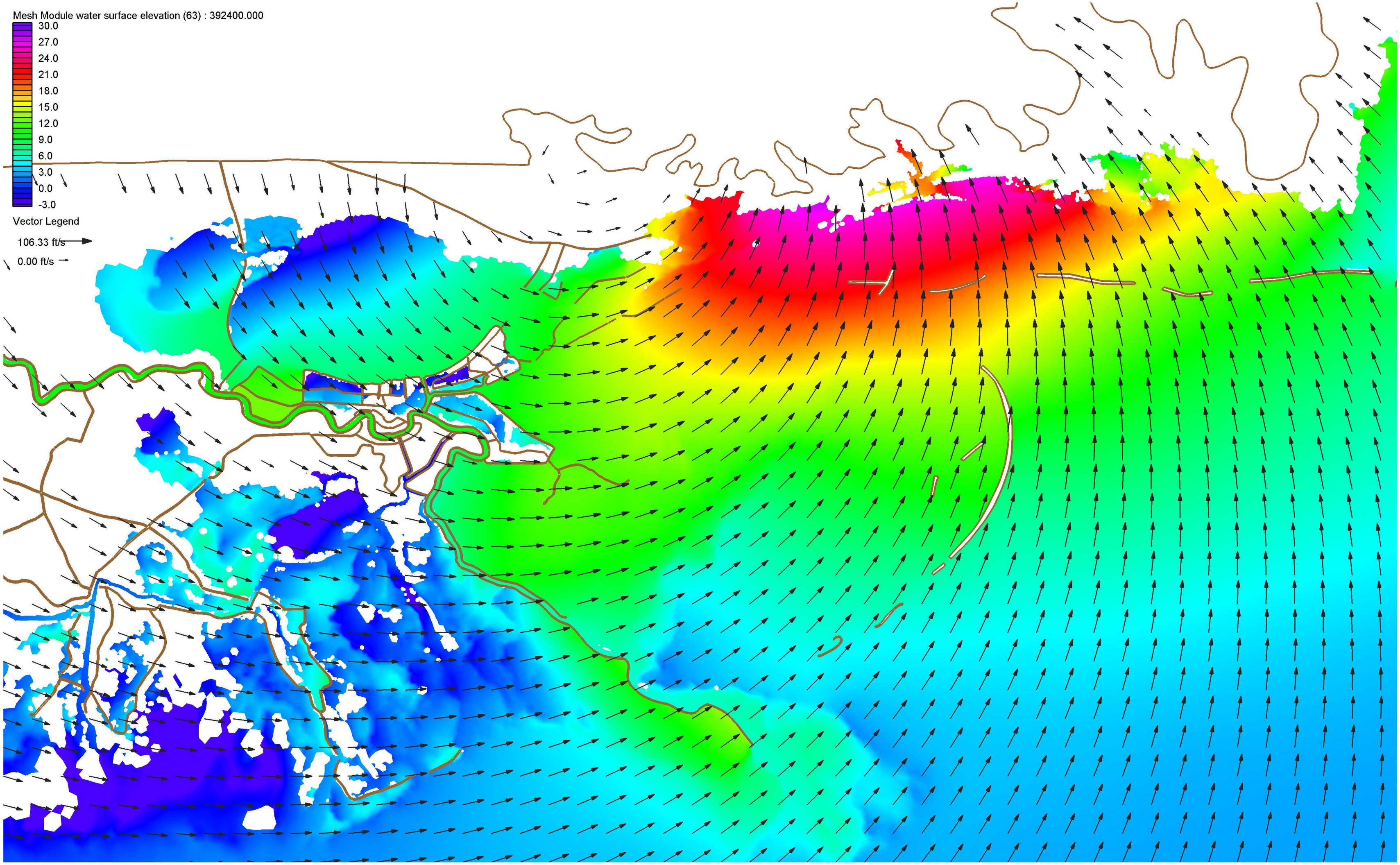
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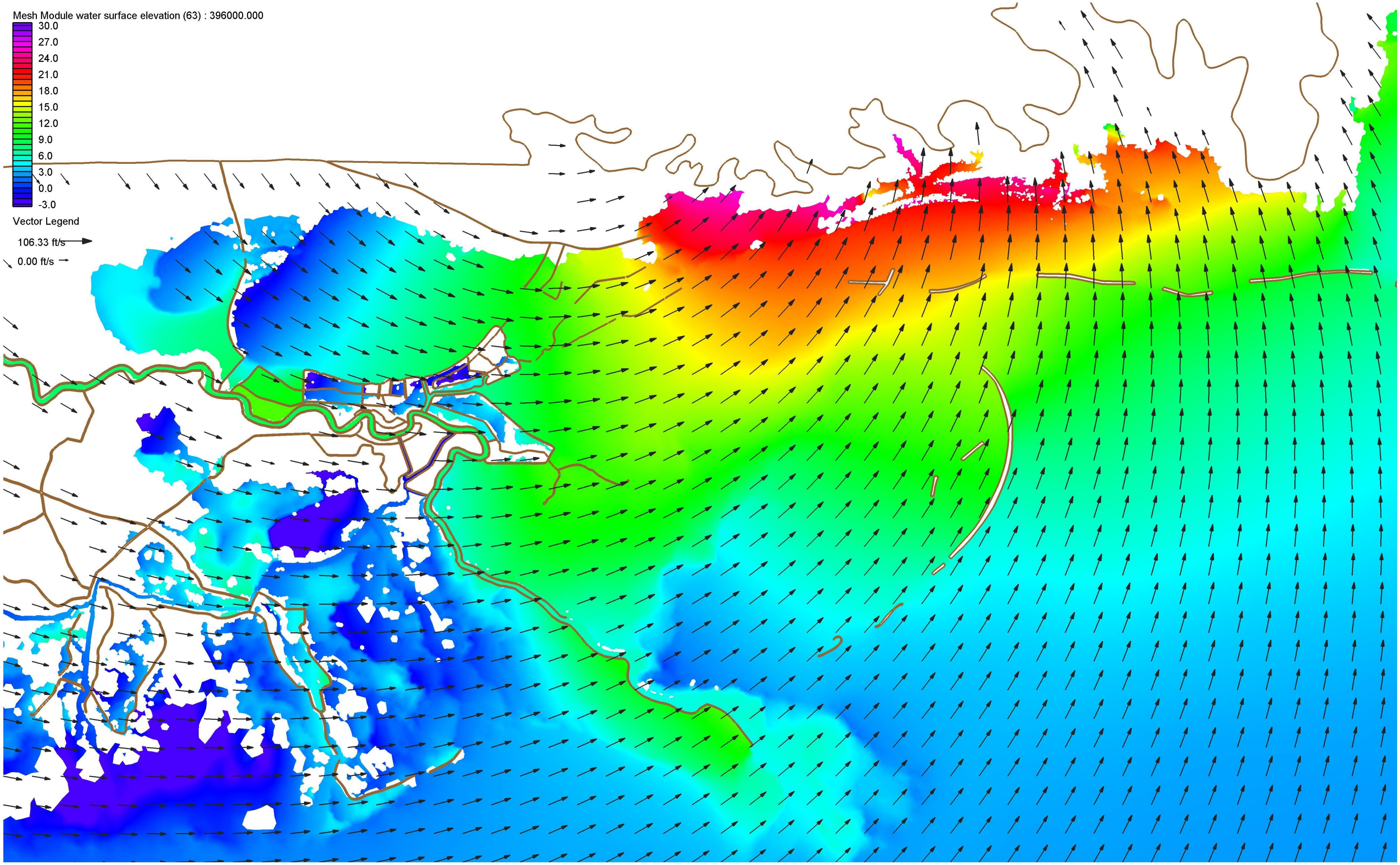
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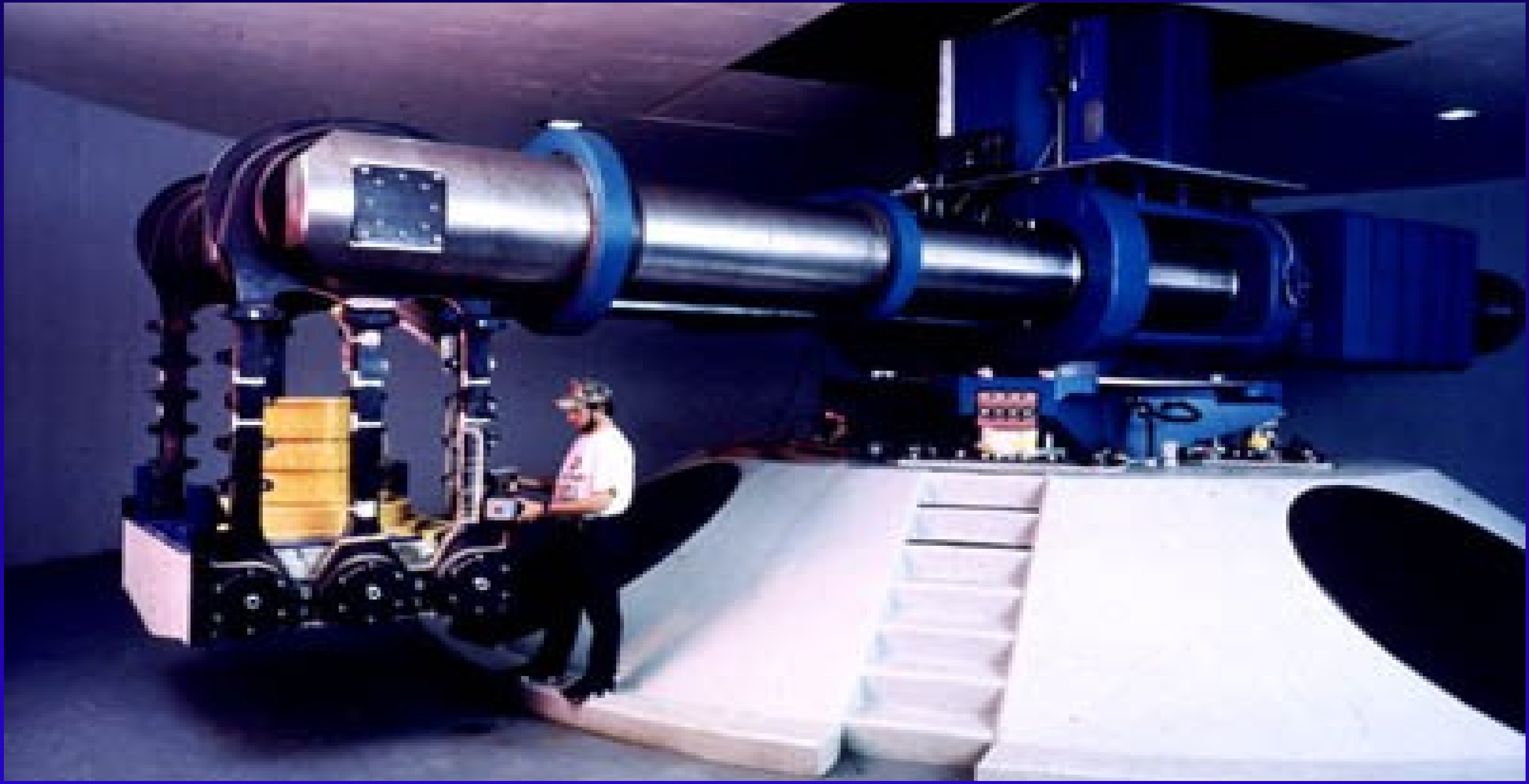
Vector Legend
106.33 ft/s
0.00 ft/s

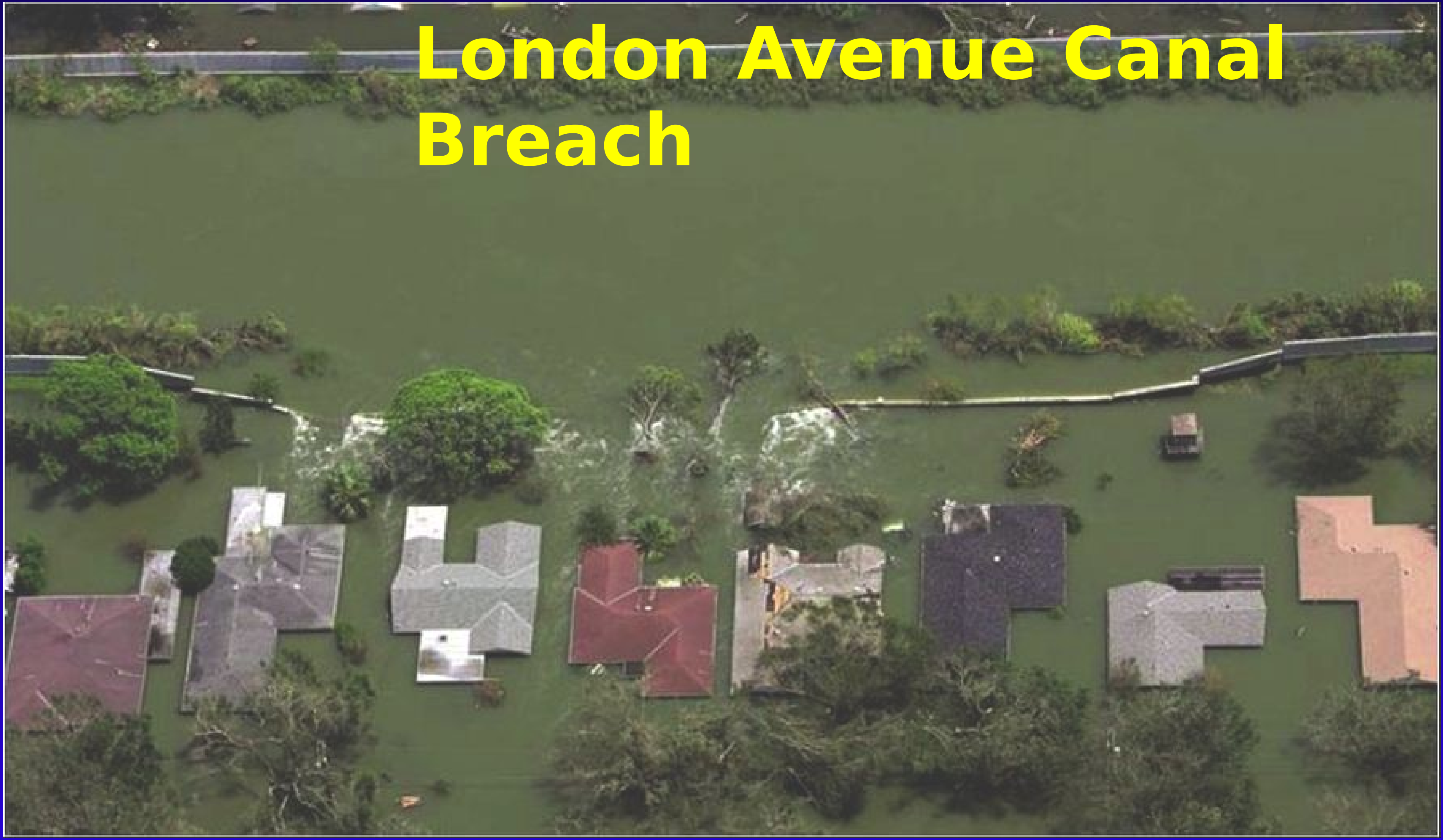
Emergency
Operations

Using the ERDC Centrifuge…

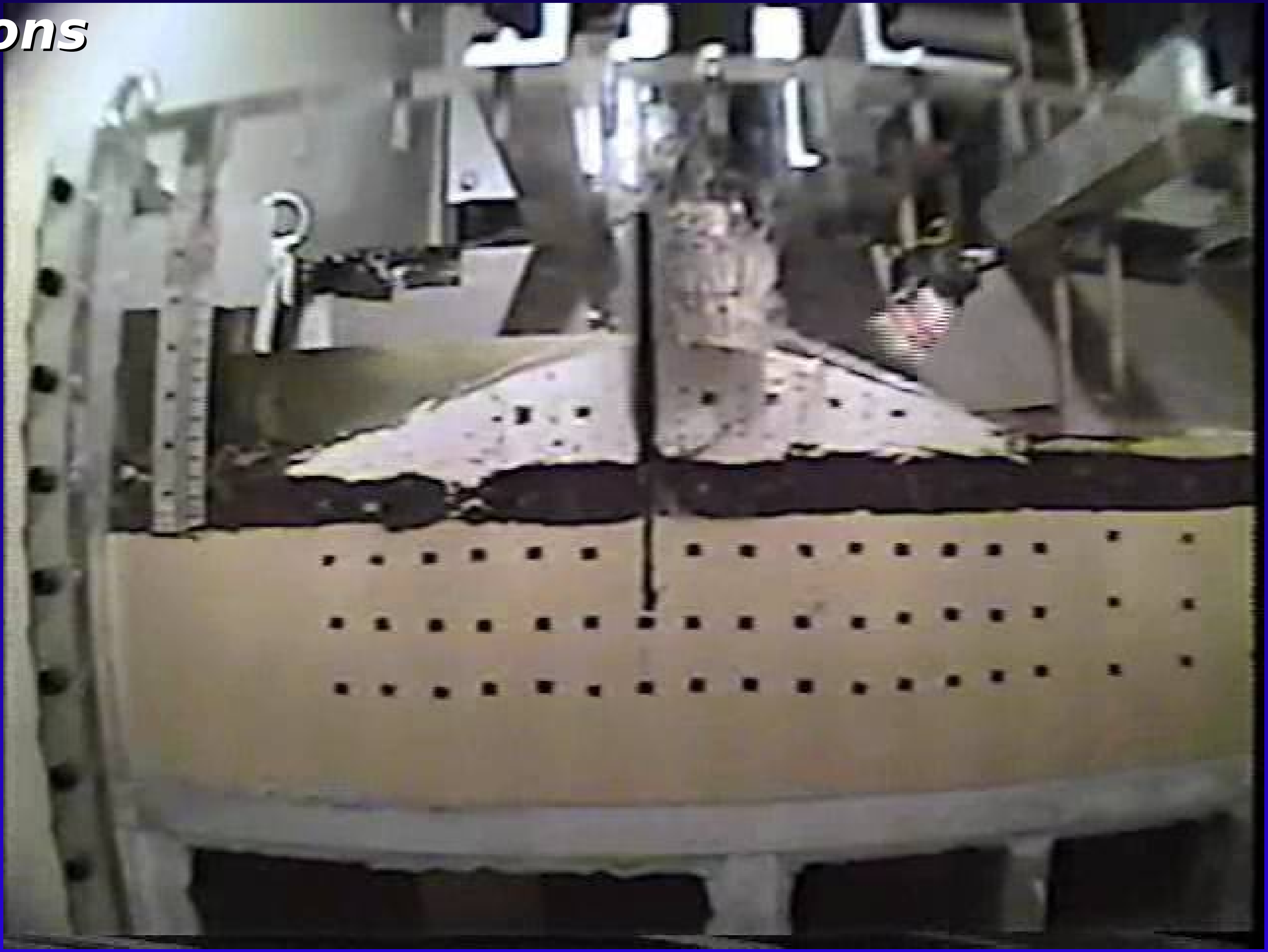


6.5 m radius, 350g, 9-ton maximum pay
(Person can take 9g for about 30 secon

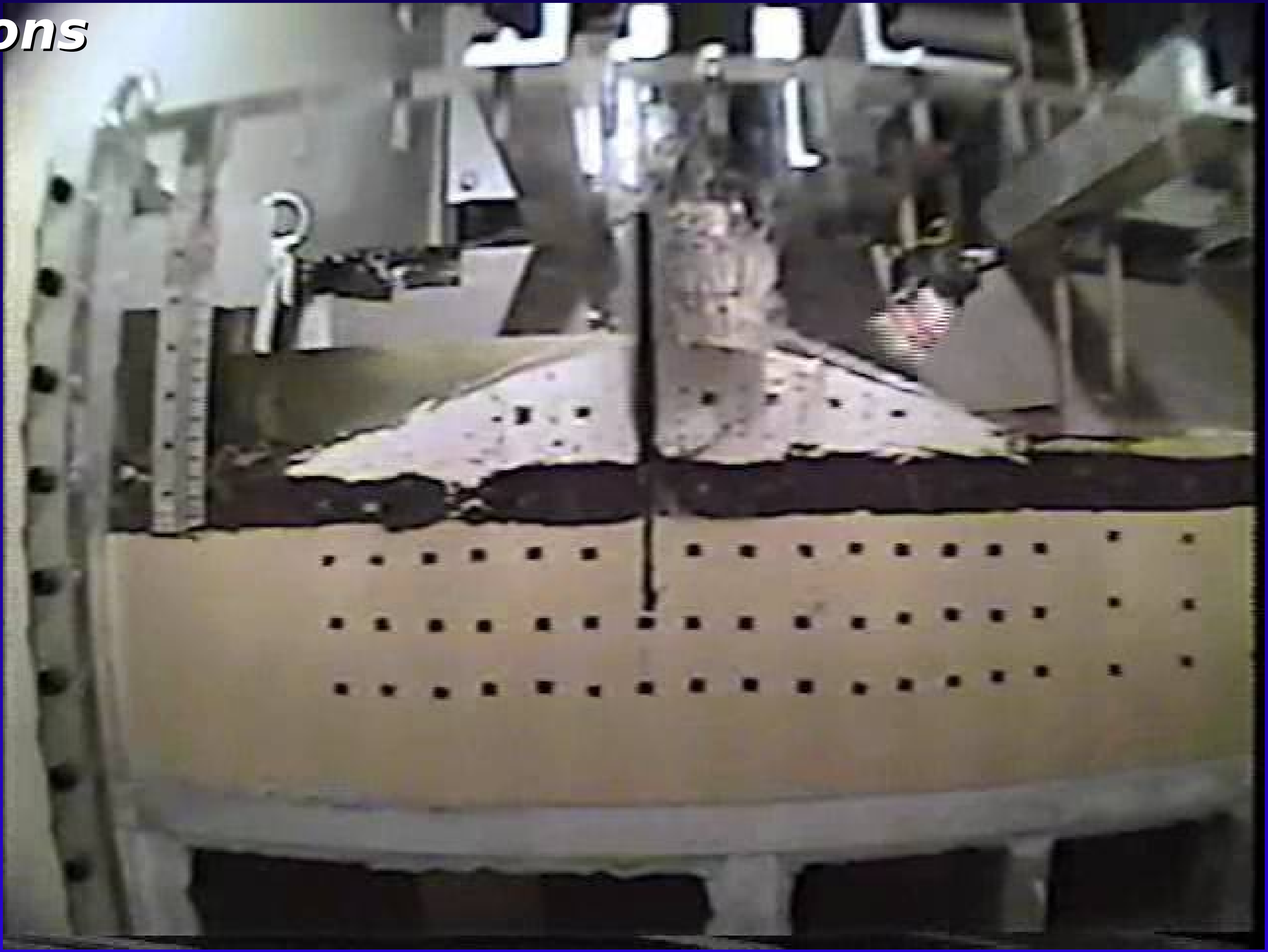
…to study the London Avenue Canal Breach



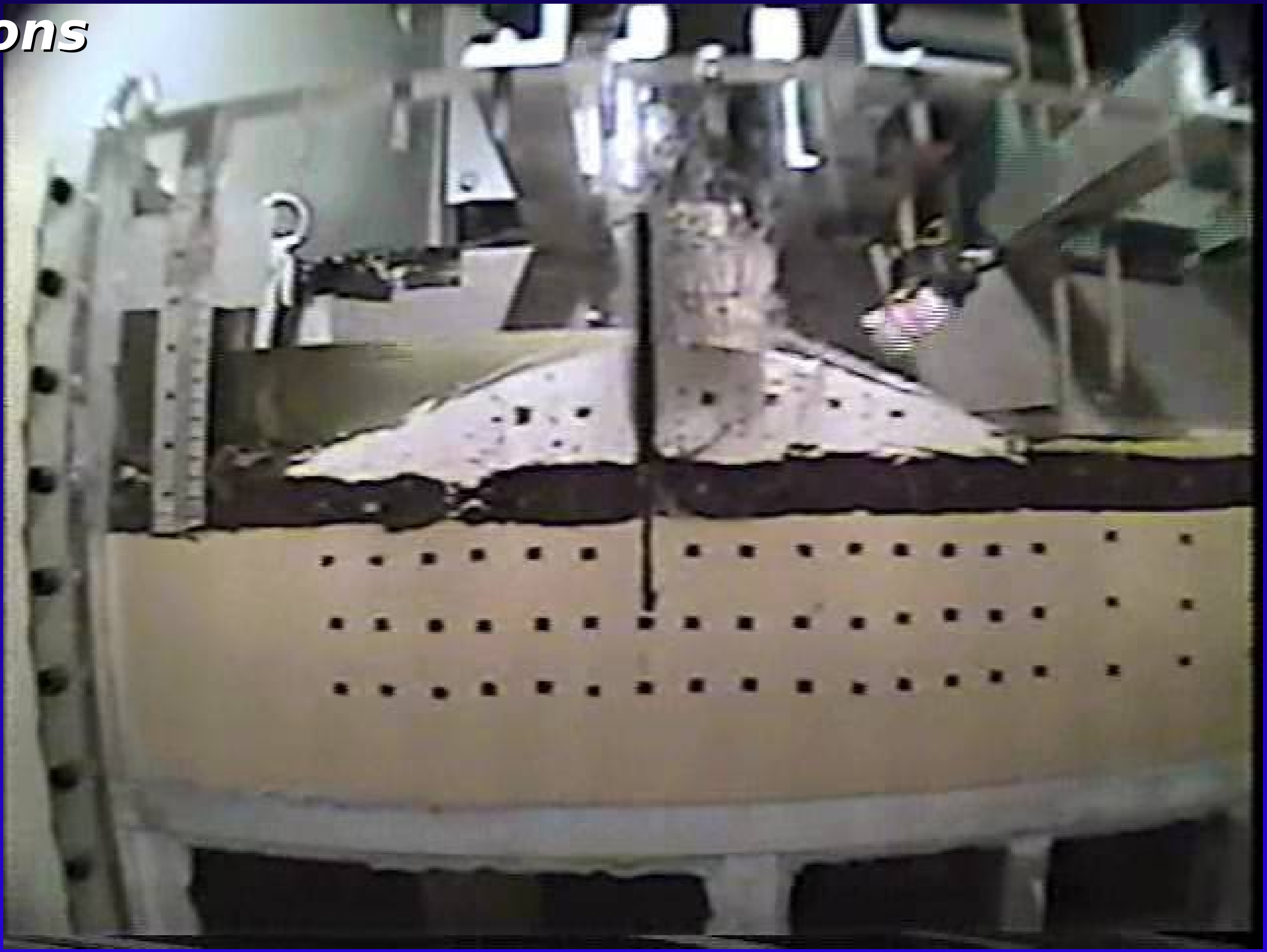
Emergency Operations



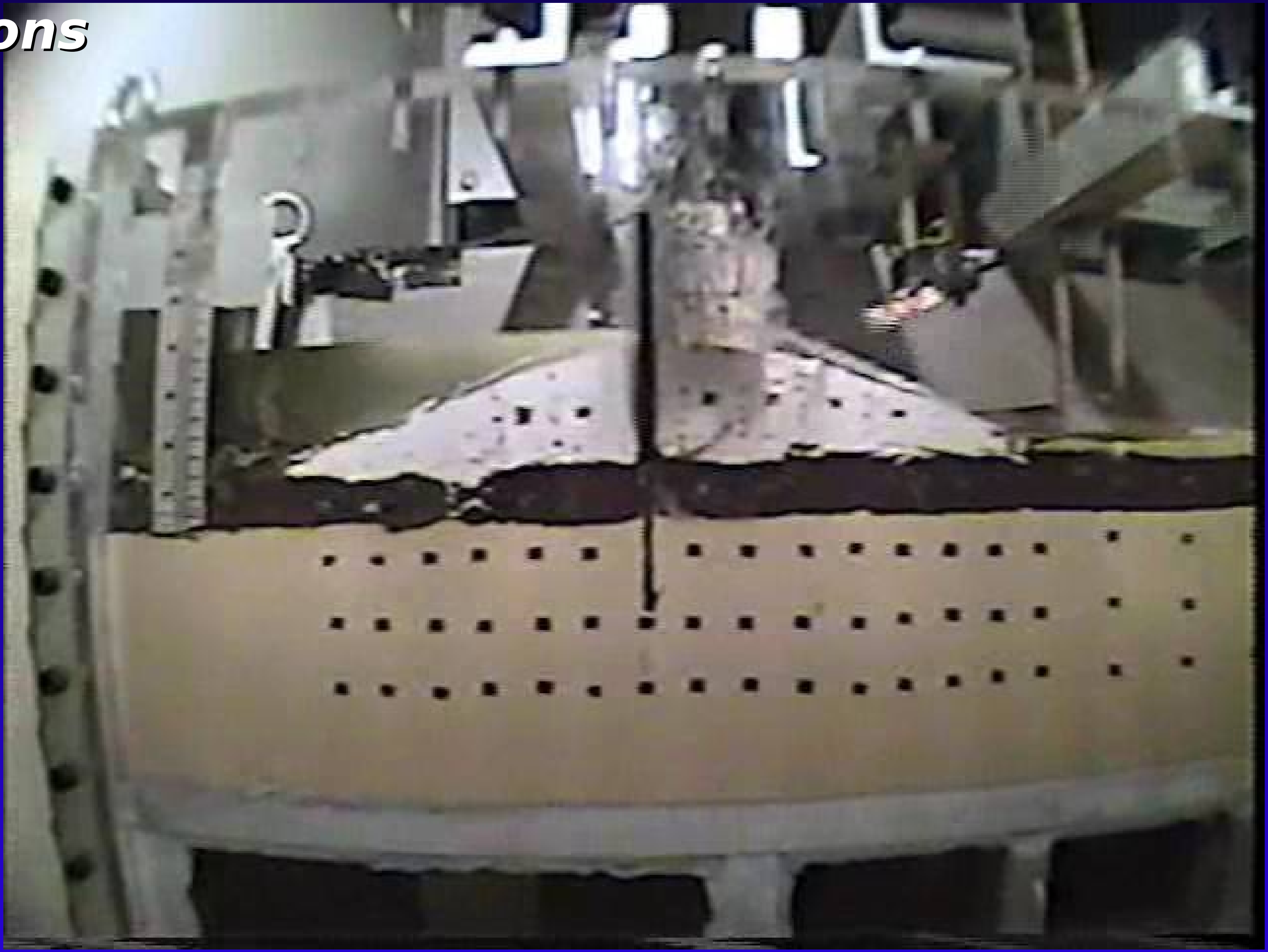
Emergency Operations



Emergency Operations

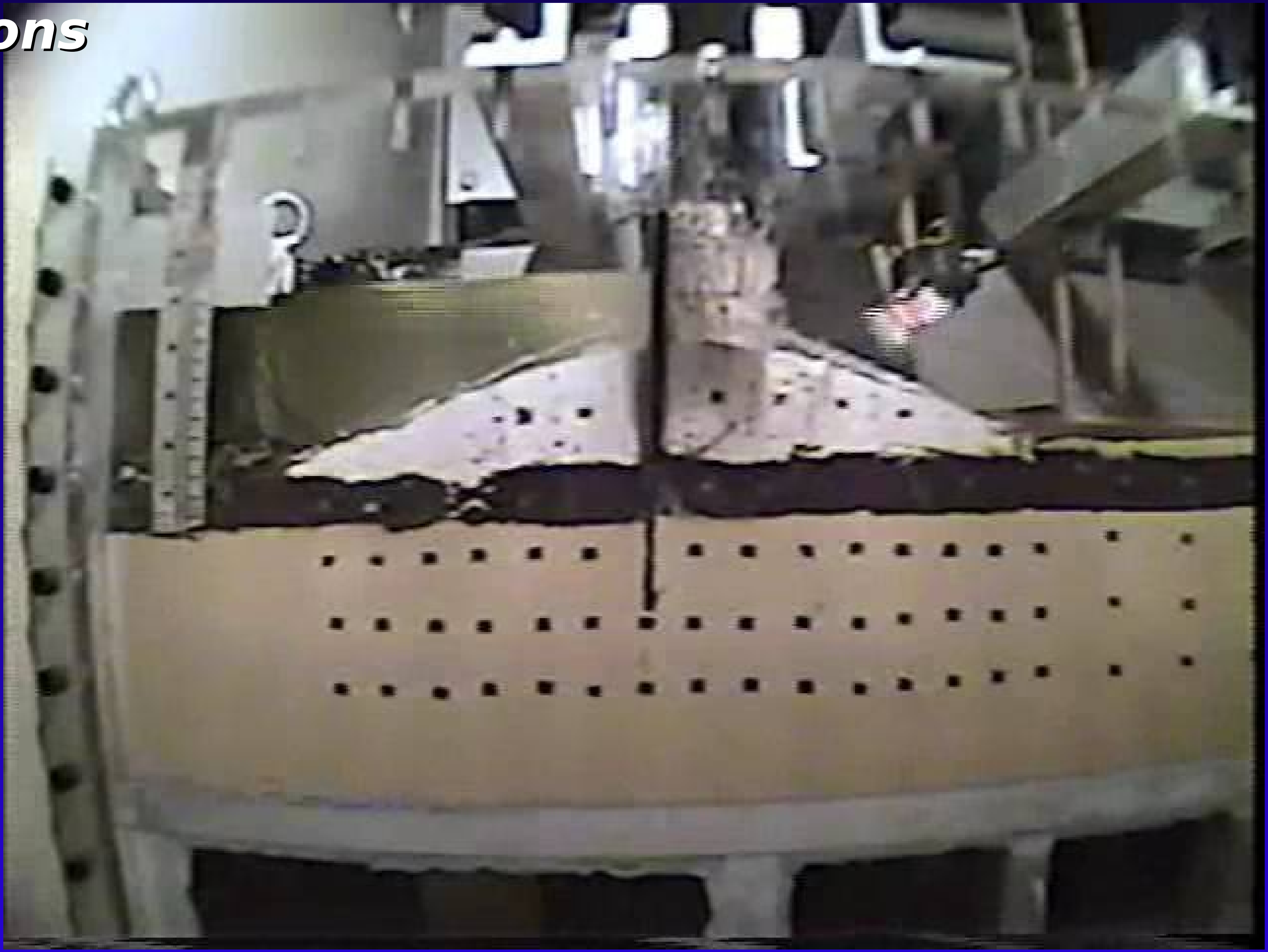


Emergency Operations



Emergency Operations

Emergency Operations



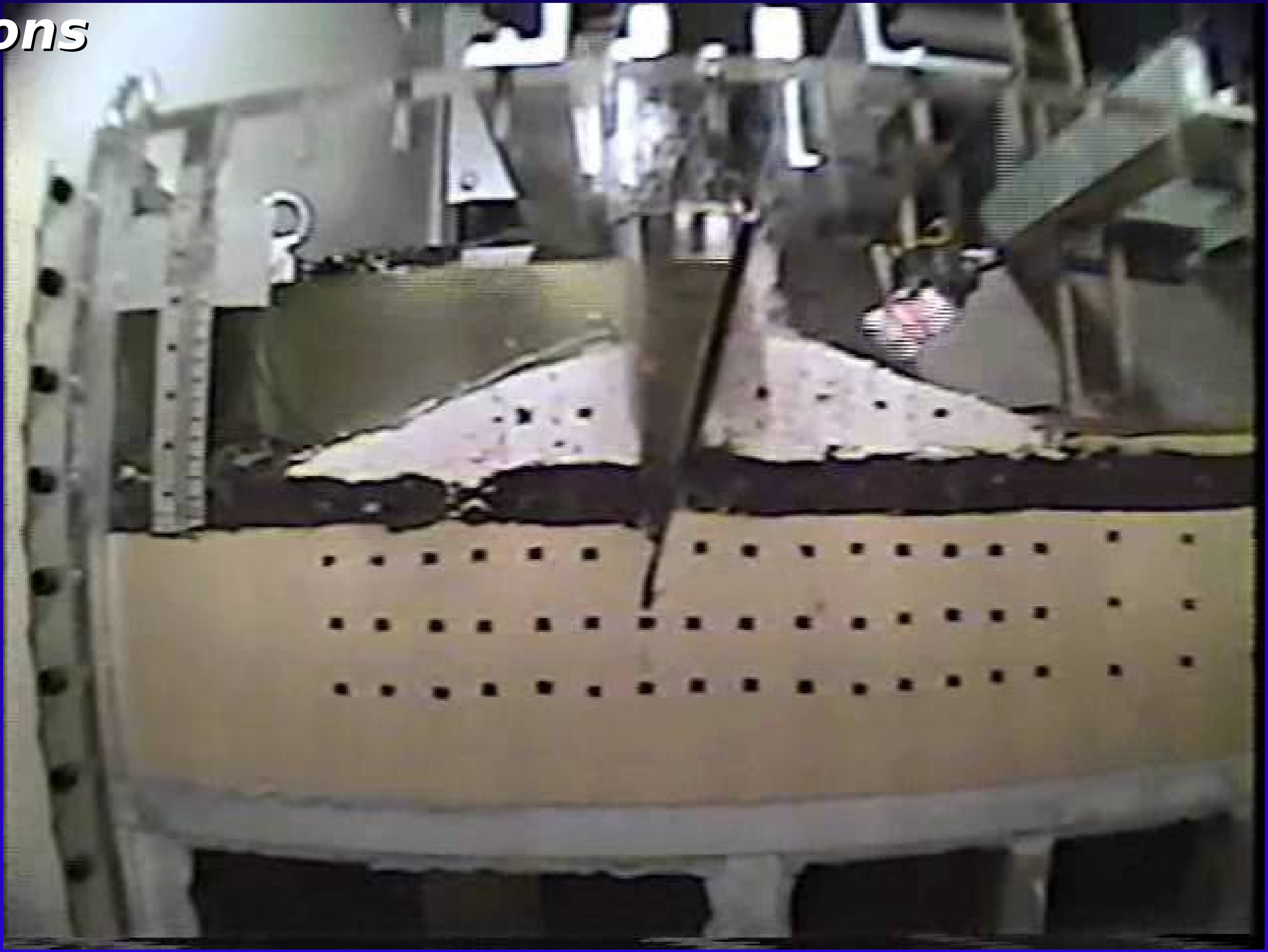
Emergency Operations

Emergency Operations

Emergency Operations

Emergency Operations

Emergency Operations



Emergency Operations

Emergency Operations

Emergency Operations

Emergency Operations

Emergency Operations

$M

Preplanned Response And Emergency Action Capabilities Team (REACT)
ACTD

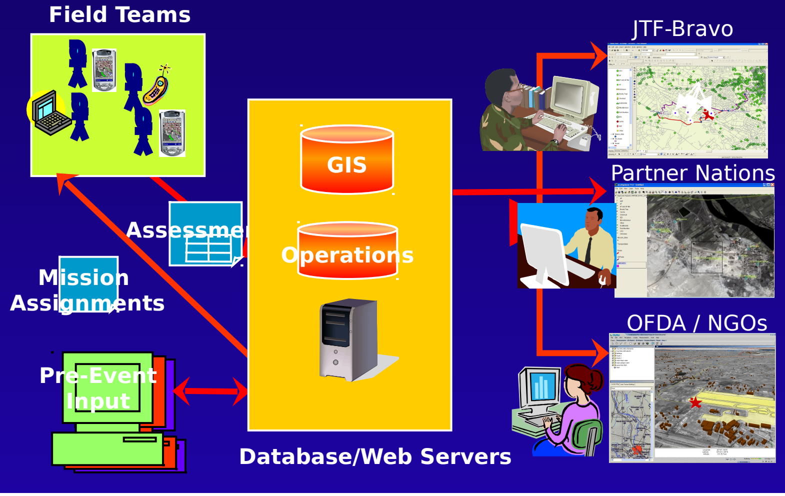
Preplanned Response & Emergency Action (PREACT)

Problem: Disaster relief efforts lack accurate assessments, situational awareness, dynamic planning, and coordinated responses

Capabilities

- Geospatial Visualization and Analysis
- Damage/Needs Assessment
- Crisis Information Management

Objective: Increased regional stability and cooperation through integrated disaster response capability



PREACT Team

- User Sponsor: SOUTHCOM, USAID/OFDA
- Technical Manager: USACE
- Operational Manager: SOUTHCOM
- Transition Manager: DSCA
- Participants: HIU, IMC, and Partner Nations

Schedule

FY07 System design / prototype
FY08 Integrate planning/response tools; FAHUM ’08
FY09 Utility assessment; FAHUM ’09; Finalize CONOPS, policy
FY10 Transition

Residuals

- Core community of interest; Policy and doctrine; CONOPs/TTPs
- Historical disaster response database; Training and documentation; Integration of USG and Partner EOCs
- Geospatial COP; virtual ops centers; standardized reporting; timely assessments

Approach

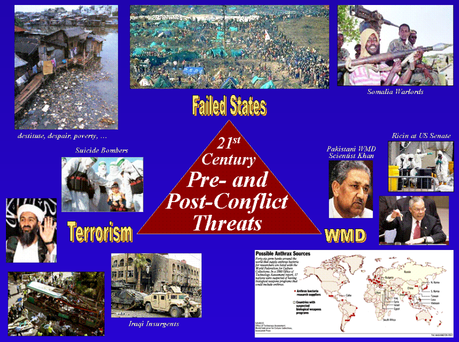
- Collaborative tool that is flexible and interoperable with open architecture (unclassified/layered access)
- Intuitive, tailorable user interface

Areas of Interest

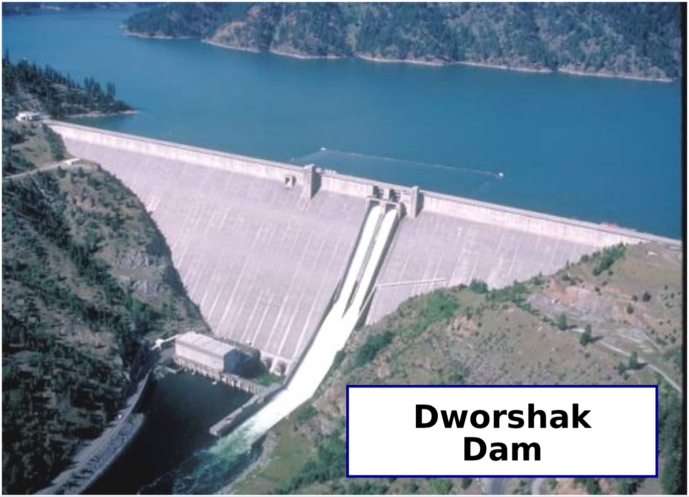
- Hurricane/Emergency Ops

- **Force Protectio**

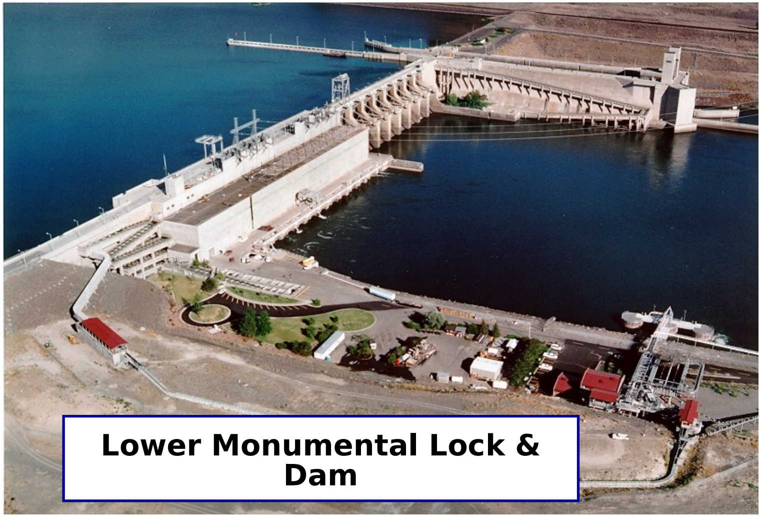
- Regional Stability


Failed States
destitute, despair, poverty, …
Somalia Warlords
21st Century Pre- and Post-Conflict Threats
Suicide Bombers
Terrorism
Iraqi Insurgents
Pakistani WMD Scientist Khan
Ricin at US Senate
WMD
Possible Anthrax Sources
Anthrax bacteria research suppliers
Countries with suspected biological weapons programs

Security and Protection of the Corps Critical Infrastructure

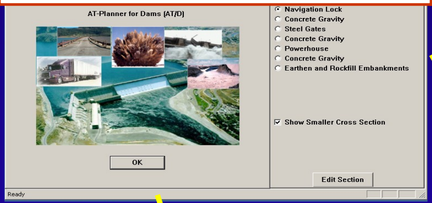


Dworshak Dam



Lower Monumental Lock & Dam

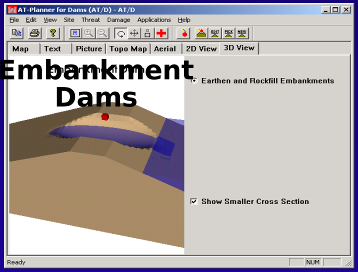
ANTI- TERRORISM PLANNER-DAMS


AT-Planner for Dams (AT/D)
OK
Edit Section
Ready

● Navigation Lock
○ Concrete Gravity
○ Steel Gates
○ Concrete Gravity
○ Powerhouse
○ Concrete Gravity
○ Earthen and Rockfill Embankments

☑ Show Smaller Cross Section

Embankment Dams


AT-Planner for Dams (AT/D) - AT/D
File Edit View Site Threat Damage Applications Help
EDIT PICK NEW
Map Text Picture Topo Map Aerial 2D View 3D View
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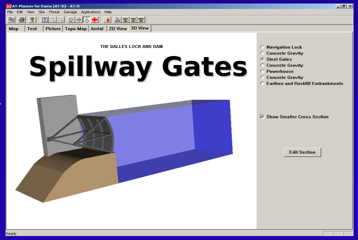
NUM

● Earthen and Rockfill Embankments

☑ Show Smaller Cross Section

Spillway Gates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File Edit View Site Threat Damage Applications Help
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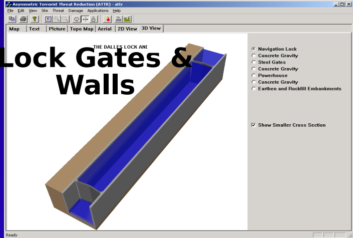
THE DALLES LOCK AND DAM
Edit Section
Ready

○ Navigation Lock
○ Concrete Gravity
● Steel Gates
○ Concrete Gravity
○ Powerhouse
○ Concrete Gravity
○ Earthen and Rockfill Embankments

☑ Show Smaller Cross Section

Lock Gates & Walls


Asymmetric Terrorist Threat Reduction (ATTR) - attr
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Map Text Picture Topo Map Aerial 2D View 3D View
THE DALLES LOCK AND
Ready

● Navigation Lock
○ Concrete Gravity
○ Steel Gates
○ Concrete Gravity
○ Powerhouse
○ Concrete Gravity
○ Earthen and Rockfill Embankments

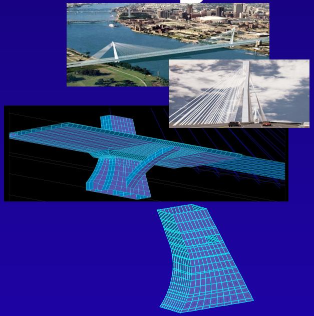
☑ Show Smaller Cross Section

Anti-Terrorism Bridge Retrofits

Brooklyn Bridge
Golden Gate Bridge
Queensboro Bridge

Cooper River Bridge, Charleston, SC

Bridge Antiterrorism retrofit R&D for all major US bridges



I-70 Bridge, MS River, MO/IL

Woodrow Wilson Bridge

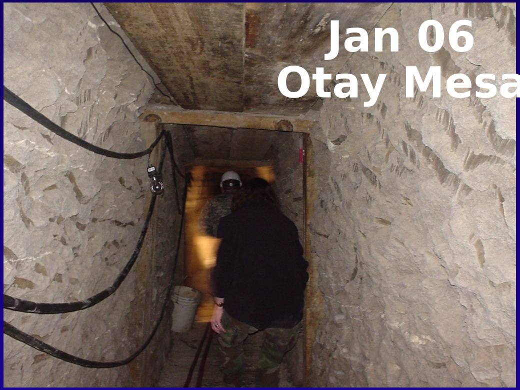
Typical Test Setup
Cellular Tower Targets, Attached to fixed reaction structure.
Bomb: Liquid Nitromethane
HOB = Target Mid-Height
Standoff
t= 9.1193E+00 ms

Funding from Federal Highway Administration, FEMA, State Pooled Fund, City of New York, private sector

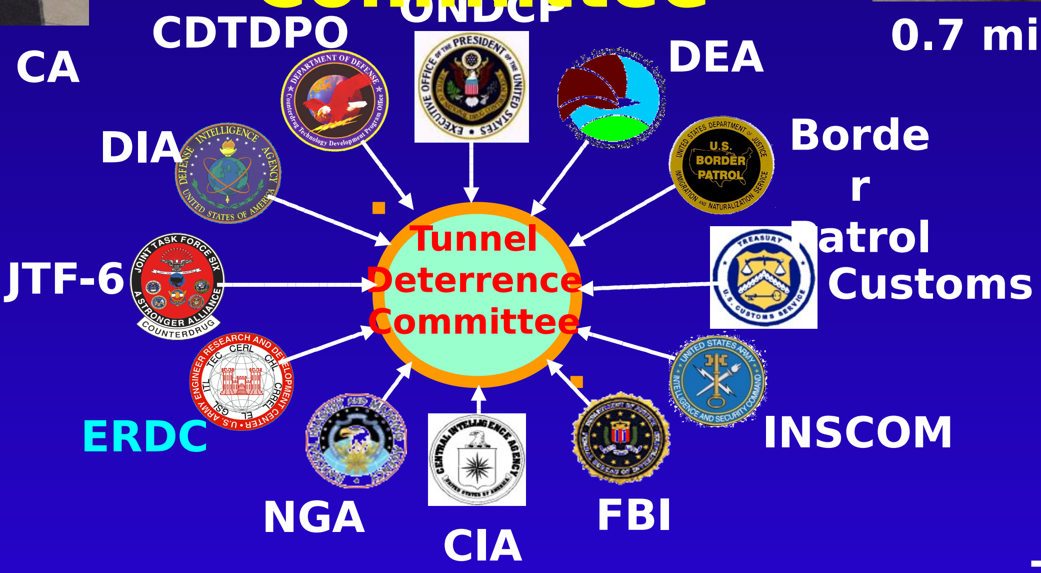
ERDC is the Technology Arm of Tunnel Deterrence Committee

ERDC Team
Jan 06

ERDC, Otay Mesa, CA



0.7 miles, 80 ft deep



Tunnel Deterrence Committee

CDTDPO

ONDCP

DEA

DIA

Border Patrol

JTF-6

Customs

ERDC

INSCOM

NGA

CIA

FBI

Tijuana, July 04

Tijuana, Jan 06

- Committee has made 39 clandestine tunnels discoveries since 9/11
- ERDC led DoD team in Iraq detecting prison tunnels

Unexploded Ordnance (UXO) Cleanup

Magnitude of Problem: Defense Science Board (2003) estimates cleanup cost with current technology of **$20-50 Billion**

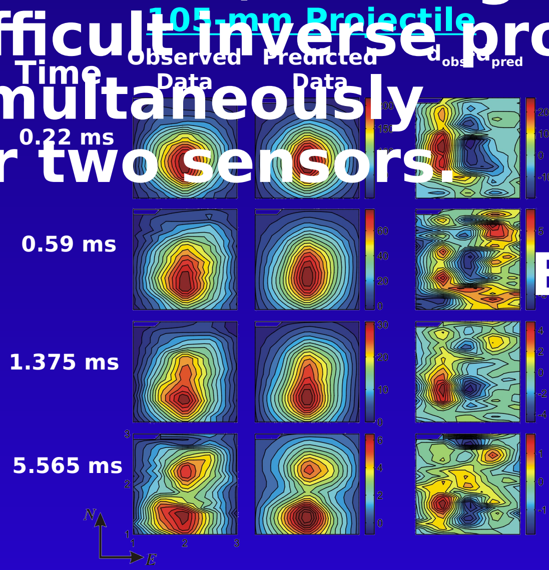
Current Technology: Cannot distinguish UXO from shrapnel - typically 1/100 ratio

Consequence: Resource agencies require all targets to be hand dug – typically, one UXO is found per 100 holes

Example at Fort Ord cited by Defense Science Board:

12,040	Holes dug
1,718	No metal
10,215	Shrapnel/Other metal
105	“UXO-like” objects
2	UXO

Achievement: First detector that can distinguish shrapnel, etc, from UXO, solving a very difficult inverse problem simultaneously for two sensors.



Blind field tests

Outcome: FY06 tests are showing 90% detection & discrimination of UXO in complex site conditions

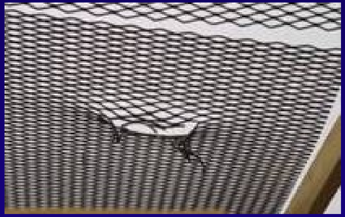
Force Protection

$M

Problem: **Soldiers vulnerable to rocket, mortar, & vehicle bombs**

Trailer Parks and Tent Cities

Masonry Buildings



Thermoplastic film
Adhesive

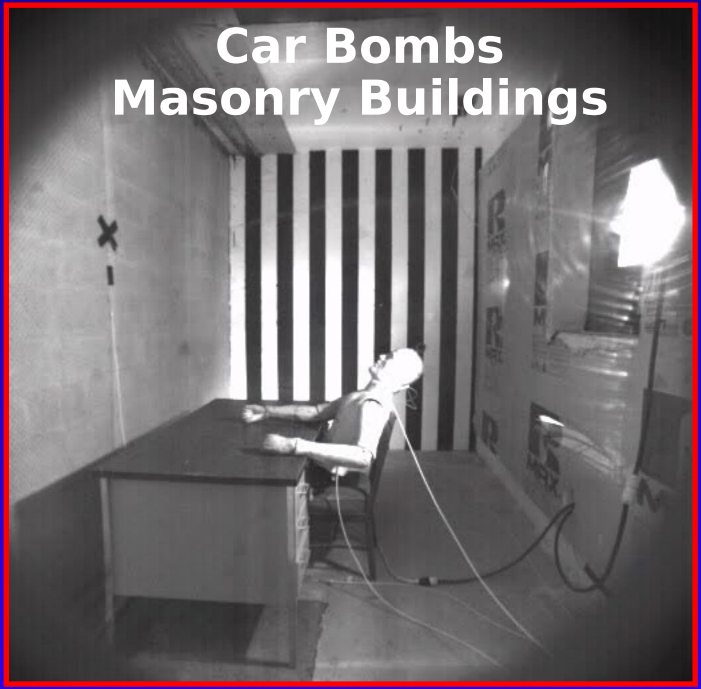
- **Chain link used throughout theater had no effect on mortar pre-detonation**
- **Plain plywood worked**
- **Kevlar blankets no effect on fragments traveling 5-6K ft/sec**
- **Developed flexible concrete armor with ballistic performance comparable to composite armors that worked**
- **Developed elastomeric**

Force Protection

$M

Katyusha rocket

Mortar



Car Bombs
Masonry Buildings

Compartmentalization

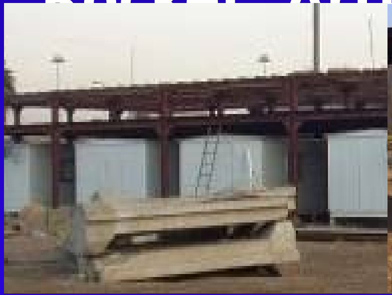
Instrumented mannequin

Force Protection

$M

Results:

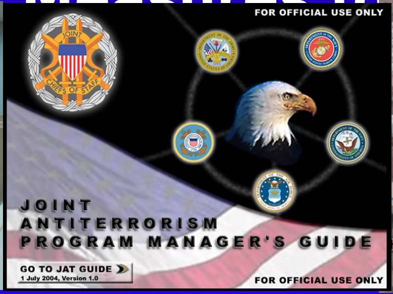
- Protection implemented in Iraq as soon as 48 hrs after validation and construction as soon as 1½ months after validation
- 47 large common facilities protected with compartmentalization
- $300M in FY05 Supplemental further implemented ERDC designs
- “ERDC is doing important work, you are helping protect our soldiers in the field,” - *BG Riggle, Director, CENTCOM, Joint Security Directorate*
- Army R&D Achievement Award, “Development of Co
  Rocket, Artillery and Mortar Protection Measures fo



Overhead Cover

Sidewall Protectio

Compartmentalization



FOR OFFICIAL USE ONLY

JOINT ANTITERRORISM PROGRAM MANAGER'S GUIDE

GO TO JAT GUIDE

1 July 2004, Version 1.0

FOR OFFICIAL USE ONLY

SECOND INTERNAL DRAFT

JFOB QRT

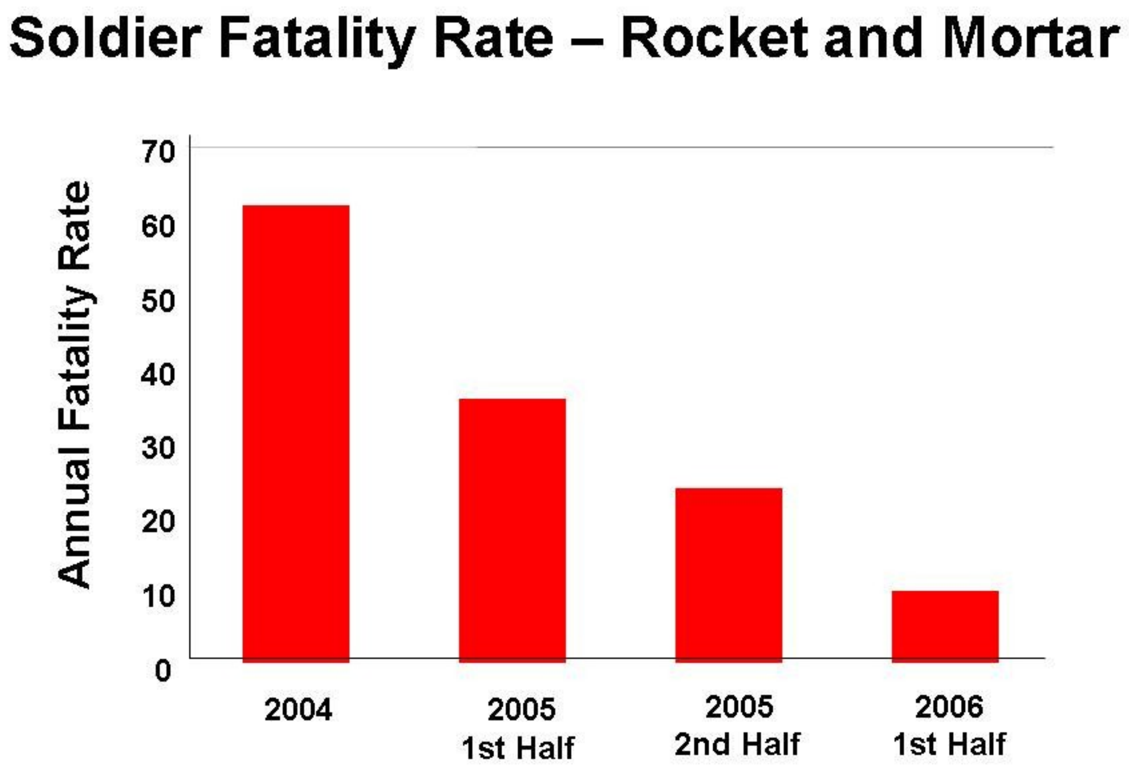
Joint Forward Operations Base (JFOB) Force Protection

Handbook of Tactics, Techniques and Procedures to Mitigate Rockets, Artillery, Mortars, and Improvised Explosive Devices

ERDC-produced joint guidance

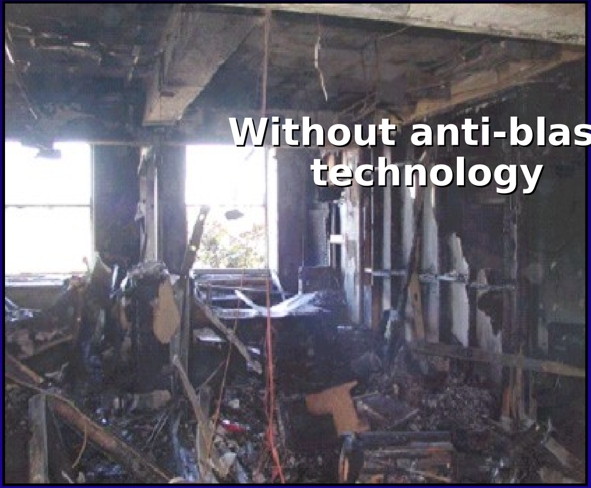
Outcome - Rapid Decline Annual Soldier Fatality Rate from Rockets and Mortars

Over 2500 rocket and mortar attacks in 05



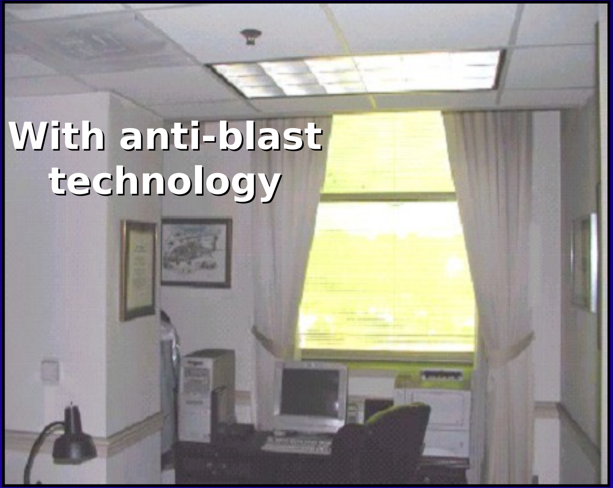
Soldiers safe when not in combat operations

Anti-Terrorism Research



Without anti-blast technology

3rd floor 90 m north of impact

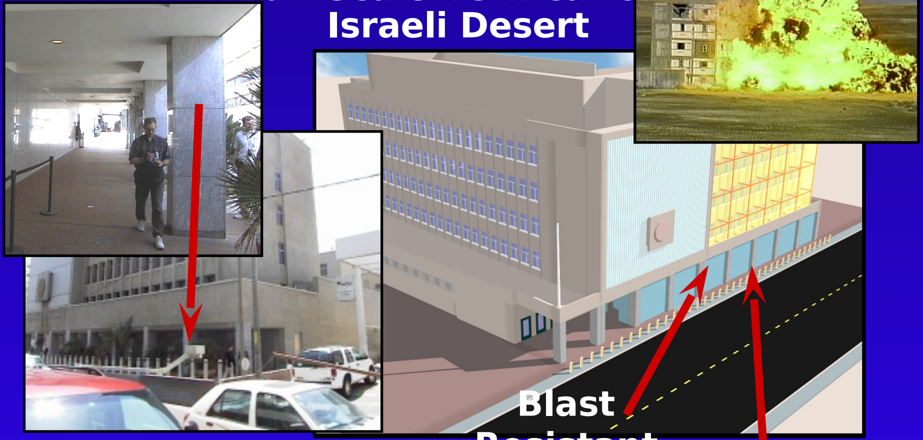


With anti-blast technology

3rd floor 17 m north of impact

3
01:16:06:15
1724+35

Full-Scale Verification Israeli Desert


Blast Resistant Wall
Retrofits
Column Wrap

US Embassy in Tel Aviv, Israel

Buckeye – IED, ISR, Urban Imagery/Terrain

- Aerial optical and LIDAR system that uses change-detection to
detect IEDs, flies on any aircraft incl
UAVs, processes information in minu

- IEDs

- Only change-detection system flying operationally in Iraq (101st Airborne) and Afghanistan (10th Mountain)
- PM being assign and becoming program of record

- ISR (Intelligence, Surveillance, Reconnaissance)

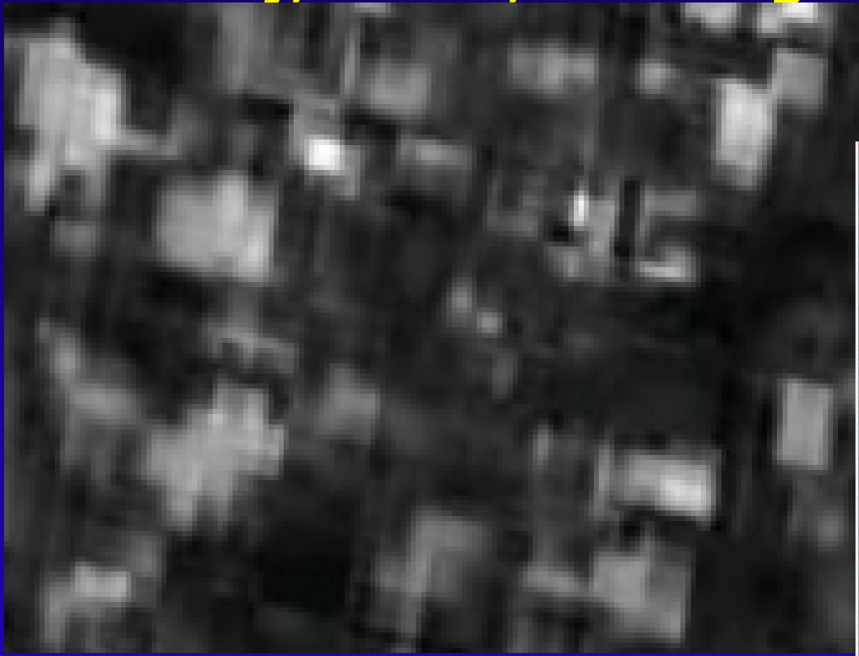
- “Imaged rockets on rooftops, mortars in backyards,
weapons caches. BuckEye is awesome” *– Army Intelligence*
- “Thanks. Your [BuckEye] images last night helped us get
the guy [key Zarqawi aide] on the east side. Hooah!”

Urban Imagery/Terrain
Old City, Mosul, 1m Imagery

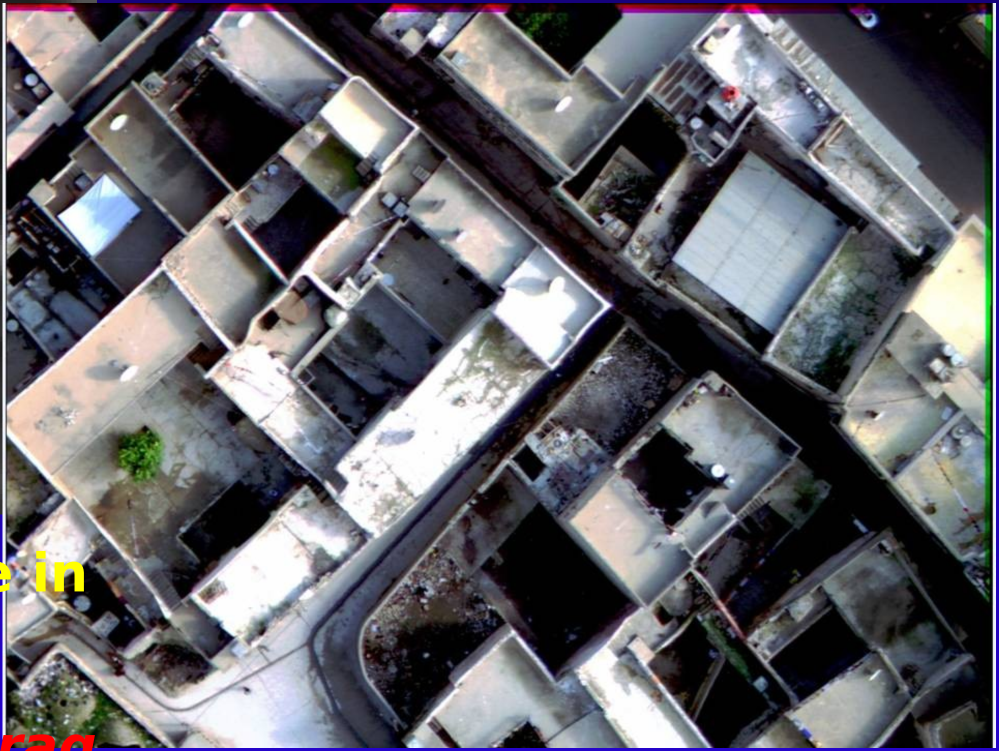
Force Protection

$M

Old City, Mosul, 1m Imagery



Old City, Mosul, BuckEye 0.06m Imagery And Terrain

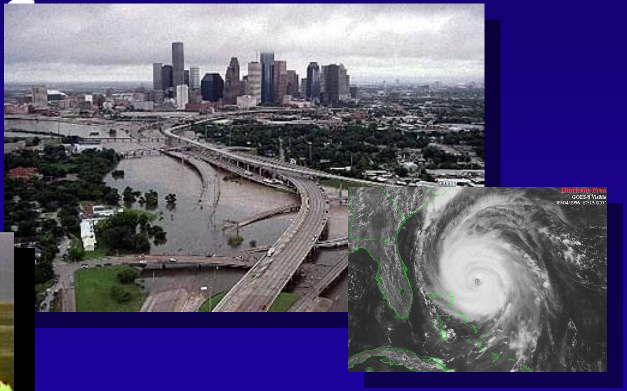


“We effectively used BuckEye in Samarra and Mosul with overwhelming results.”
- *CW2 William Jones, 2nd ID, Iraq*

“BuckEye has been the single most helpful product that we have been able to push down to battalions.” ***- CPT Chapman, 101st Airborne Division***

Areas of Interest

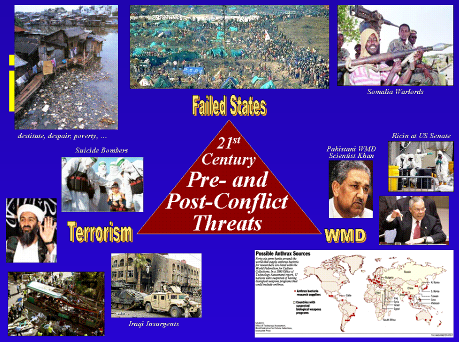
- Hurricane/Emergency Op



GOES 8 Visible

- Force Protectio

- **Regional Stabili**



destitute, despair, poverty, …
Failed States
Somalia Warlords
Suicide Bombers
21st Century Pre- and Post-Conflict Threats
Terrorism
Iraqi Insurgents
Pakistani WMD Scientist Khan
Ricin at US Senate
WMD
Possible Anthrax Sources

Regional Stability Ops – A Reality

Army/DoD/National Strategies

- Conflicts have become mu more frequent during the post cold-war era
- U.S. military is superior ar unmatched in conflict OPs
- Today, post-conflict costs outstrip conflict costs in
  - duration
  - dollars
  - political capital domestica and internationally
  - U.S. casualties (in Iraq)
- We need to conduct pre- and post-conflict operatio as decisively as conflict O

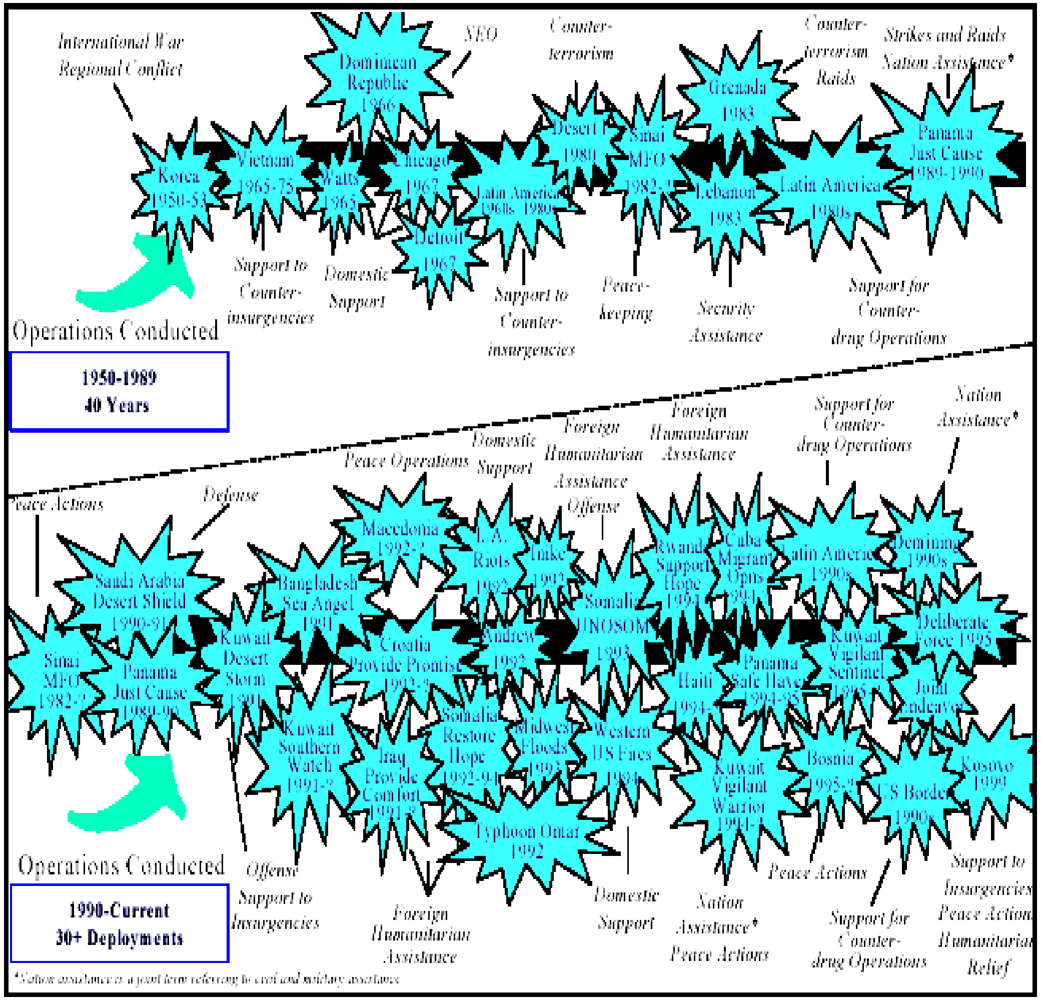
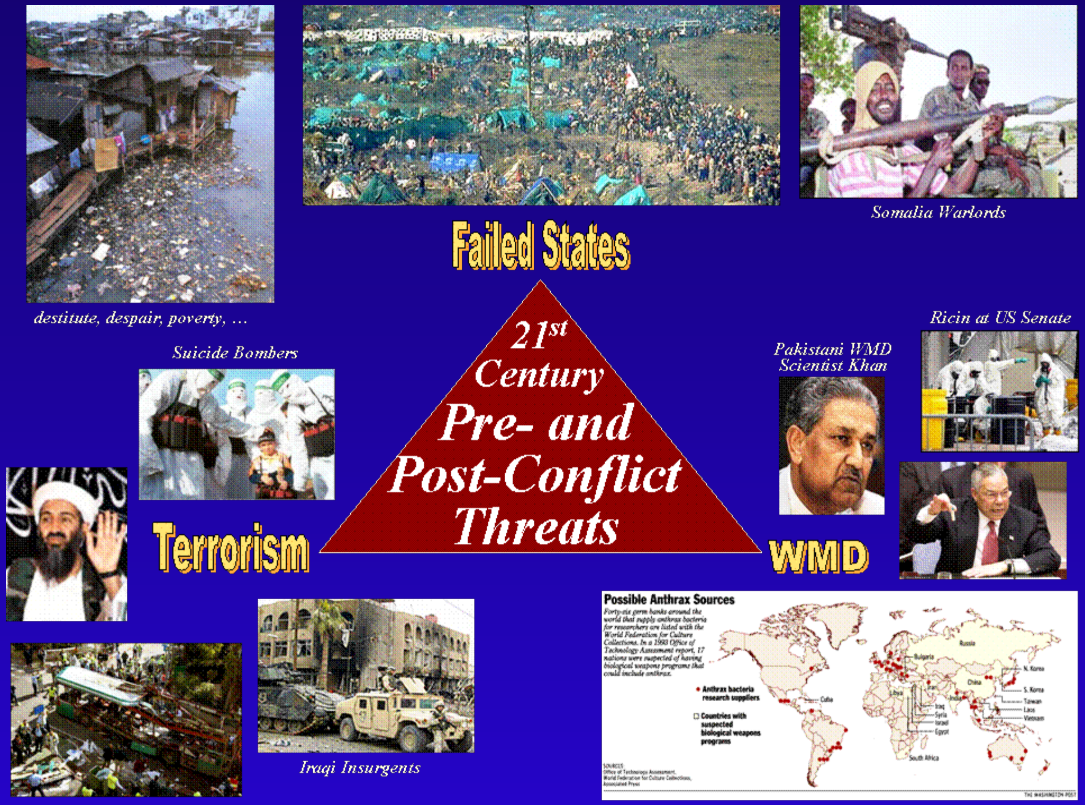

International War
Regional Conflict
Dominican Republic 1966
NEO
Counter-terrorism
Counter-terrorism Raids
Strikes and Raids
Nation Assistance*
Korea 1950-53
Vietnam 1965-75
Watts 1965
Chicago 1967
Detroit 1967
Latin America 1960s-1980s
Desert 1 1980
Sinai MFO 1982-?
Grenada 1983
Lebanon 1983
Latin America 1980s
Panama Just Cause 1989-1990
Support to Counter-insurgencies
Domestic Support
Support to Counter-insurgencies
Peace-keeping
Security Assistance
Support for Counter-drug Operations
Operations Conducted
1950-1989
40 Years
Peace Actions
Defense
Peace Operations
Domestic Support
Foreign Humanitarian Assistance
Offense
Foreign Humanitarian Assistance
Support for Counter-drug Operations
Nation Assistance*
Saudi Arabia Desert Shield 1990-91
Sinai MFO 1982-?
Panama Just Cause 1989-90
Kuwait Desert Storm 1991
Bangladesh Sea Angel 1991
Macedonia 1992-?
Croatia Provide Promise 1992-?
L.A. Riots 1992
Iniki 1992
Andrew 1992
Somalia UNOSOM 1993
Rwanda Support Hope 1994
Cuba Migrant Opns 1994
Latin America 1990s
Demining 1990s
Deliberate Force 1995
Kuwait Vigilant Sentinel 1995-?
Haiti 1994-?
Panama Safe Haven 1994-95
Joint Endeavor
Kuwait Southern Watch 1991-?
Iraq Provide Comfort 1991-?
Somalia Restore Hope 1992-94
Midwest Floods 1993
Western US Fires 1994
Typhoon Omar 1992
Kuwait Vigilant Warrior 1994-?
Bosnia 1995-?
US Border 1990s
Kosovo 1999
Operations Conducted
1990-Current
30+ Deployments
Offense
Support to Insurgencies
Foreign Humanitarian Assistance
Domestic Support
Nation Assistance*
Peace Actions
Peace Actions
Support for Counter-drug Operations
Support to Insurgencies
Peace Actions
Humanitarian Relief
*Nation assistance is a joint term referring to civil and military assistance

Figure 1-4. Increasing Frequency of Operations

Pre- and Post-Conflict Threats

Convergence of WMD proliferation, global terrorism and failed/weak states


destitute, despair, poverty, …
Failed States
Somalia Warlords
Suicide Bombers
21st Century Pre- and Post-Conflict Threats
Terrorism
Iraqi Insurgents
Pakistani WMD Scientist Khan
Ricin at US Senate
WMD
Possible Anthrax Sources
Anthrax bacteria research suppliers
Countries with suspected biological weapons programs
Russia
Bulgaria
N. Korea
China
S. Korea
Taiwan
Laos
Vietnam
Iran
India
Libya
Cuba
Iraq
Syria
Israel
Egypt
South Africa
THE WASHINGTON POST

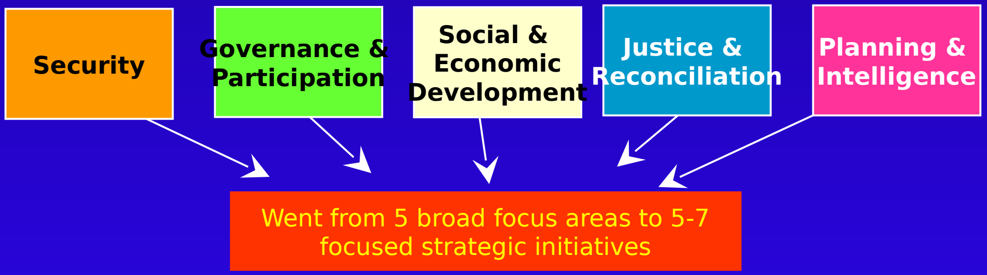
Forty-six germ banks around the world that supply anthrax bacteria for researchers are listed with the World Federation for Culture Collections. In a 1993 Office of Technology Assessment report, 17 nations were suspected of having biological weapons programs that could include anthrax.

SOURCES: Office of Technology Assessment, World Federation for Culture Collections, Associated Press

"One of the principal lessons of the events of September 11 is that failed states matter - for national security as well as for humanitarian reasons. If left to their own devices, such states can become sanctuaries for terrorist networks, organized crime and drug traffickers as well as posing grave humanitarian challenges and threats to regional stability." Final Report of the bi-partisan Commission on Post-Conflict Reconstruction January 2003

R&D Strategy

- Apr 04 National Science and Technology Council (NSTC); Subcommittee on National Security R&D commissioned the Regional Security/Capacity Building R&D Strategy Interagency Working Group
- Held Facilitated Workshops on 3 Dec 2004, 23 Feb 2005, and 18 Mar 2005 to Identify and Prioritize Interagency Requirements
- Develop Focused R&D Initiatives



Security

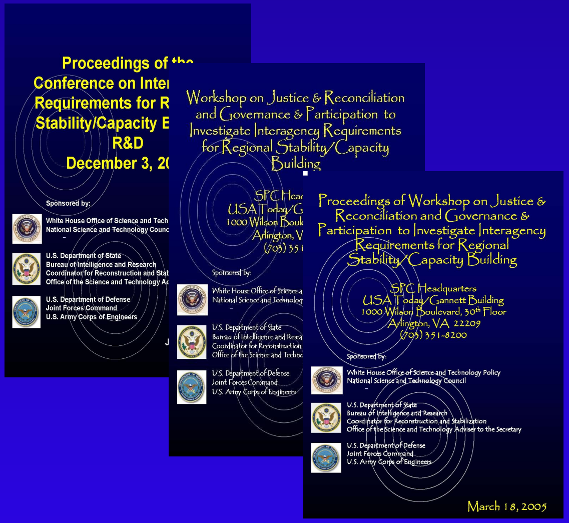
Governance & Participation

Social & Economic Development

Justice & Reconciliation

Planning & Intelligence

Went from 5 broad focus areas to 5-7 focused strategic initiatives



Workshop on Justice & Reconciliation and Governance & Participation to Investigate Interagency Requirements for Regional Stability/Capacity Building

Proceedings of Workshop on Justice & Reconciliation and Governance & Participation to Investigate Interagency Requirements for Regional Stability/Capacity Building

SPC Headquarters
USA Today/Gannett Building
1000 Wilson Boulevard, 30th Floor
Arlington, VA 22209
(703) 351-8200

Sponsored by:

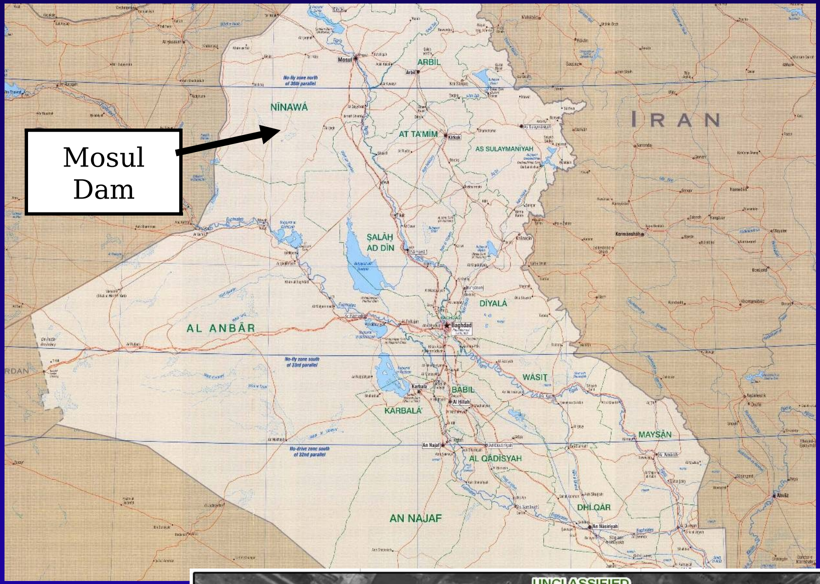
White House Office of Science and Technology Policy
National Science and Technology Council
–

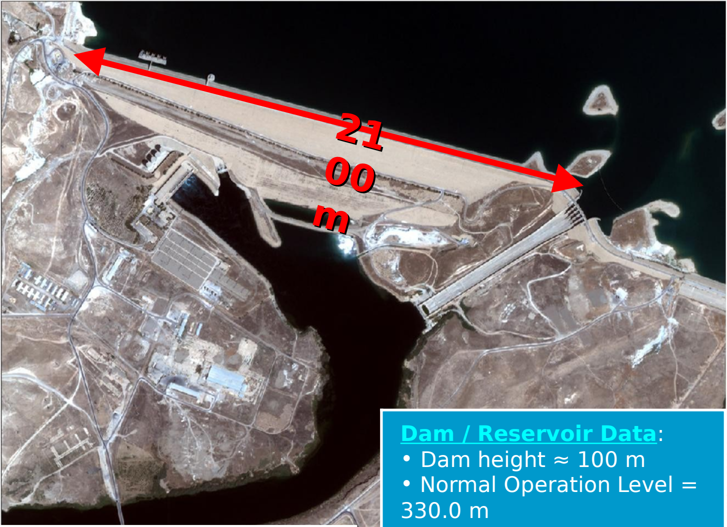
U.S. Department of State
Bureau of Intelligence and Research
Coordinator for Reconstruction and Stabilization
Office of the Science and Technology Adviser to the Secretary

U.S. Department of Defense
Joint Forces Command
U.S. Army Corps of Engineers

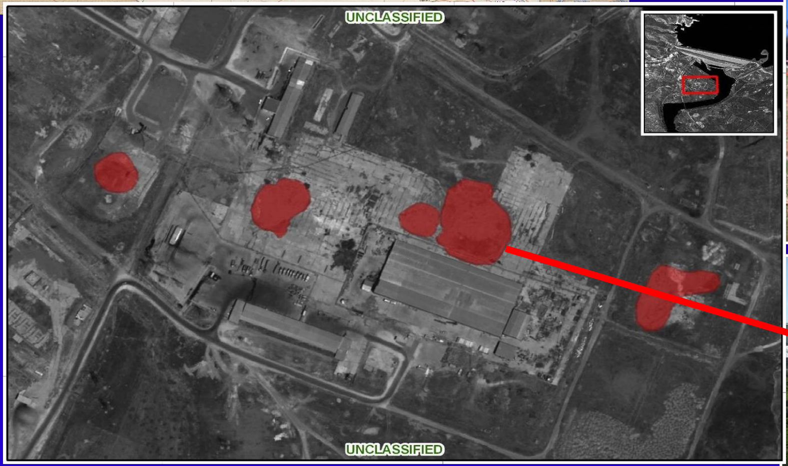
March 18, 2005

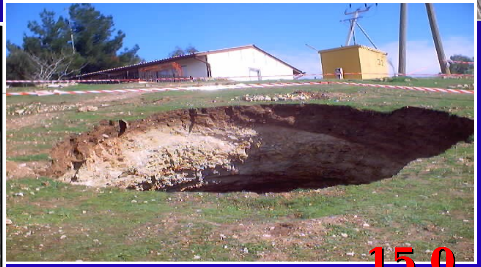
Mosul Dam


Mosul Dam
NĪNAWĀ
ARBĪL
AT TA'MĪM
AS SULAYMĀNĪYAH
IRAN
ŞALĀH AD DĪN
DIYĀLĀ
AL ANBĀR
Baghdād
WĀSIT
BĀBIL
KARBALĀ'
MAYSĀN
AL QĀDISĪYAH
DHĪ QĀR
AN NAJAF

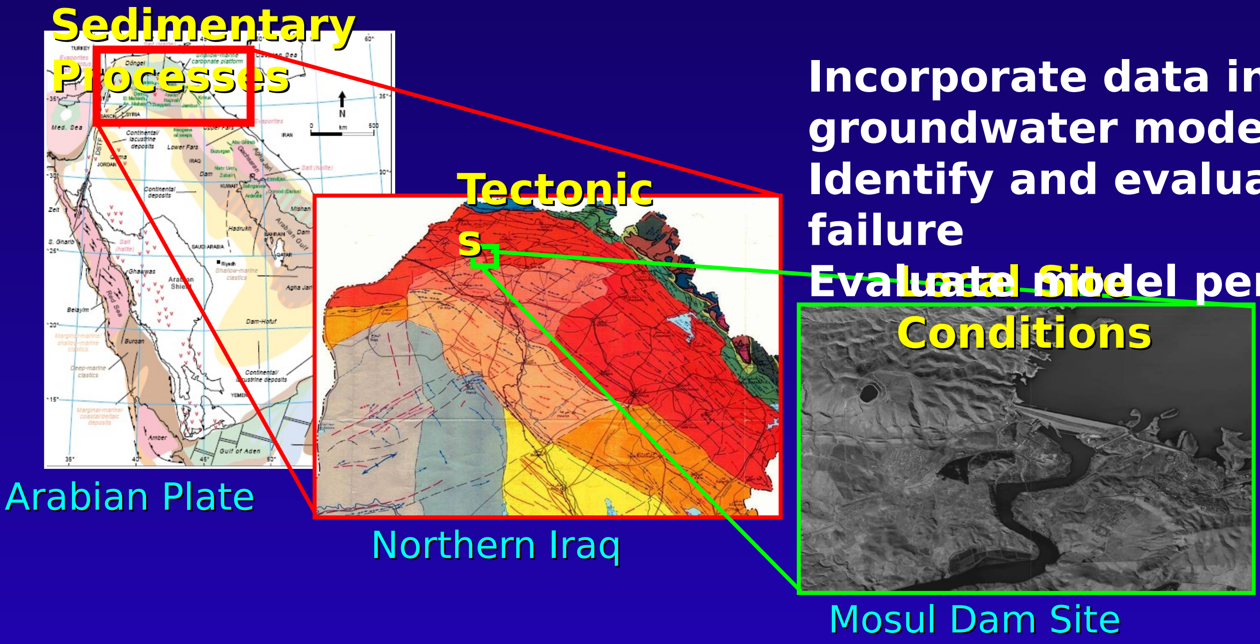


Dam / Reservoir Data:
- Dam height ≈ 100 m
- Normal Operation Level = 330.0 m
- Normal Storage = 11.1 x 10^9 m^3
- Water Level as of 23Aug06 = 316.1 m


UNCLASSIFIED
UNCLASSIFIED



3-Tier Geologic Approach

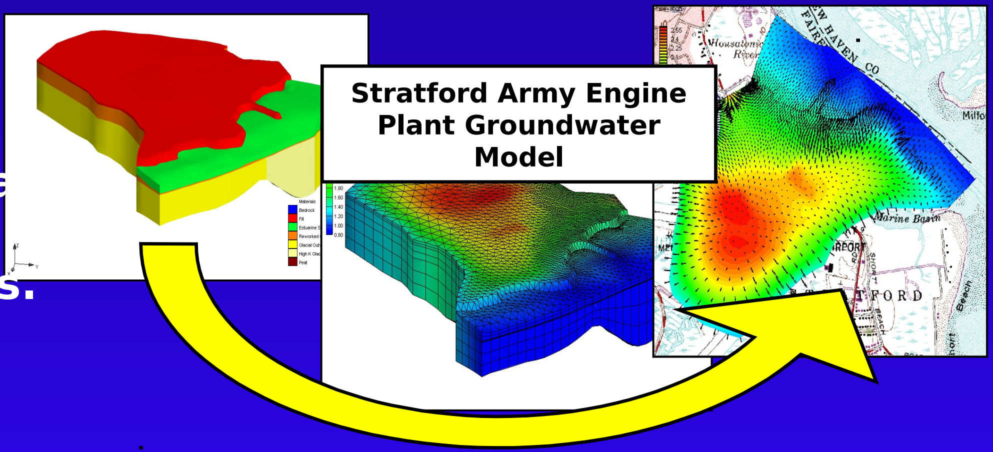

Sedimentary Processes
Tectonics
Local Site Conditions
Arabian Plate
Northern Iraq
Mosul Dam Site

Incorporate data into numerical / groundwater model

Identify and evaluate potential modes of failure

Evaluate model performance

Developing detailed plans for model training, model technica support, grouting support and additional geotechnical studies.


Stratford Army Engine Plant Groundwater Model

Measuring Progress in a Conflict Environment (MPICE)

Across Sectors:

Security

★

Political Stability and Governance

★

Public Safety and the Rule of Law

★

Economic Sustainability

Example: Rule of Law

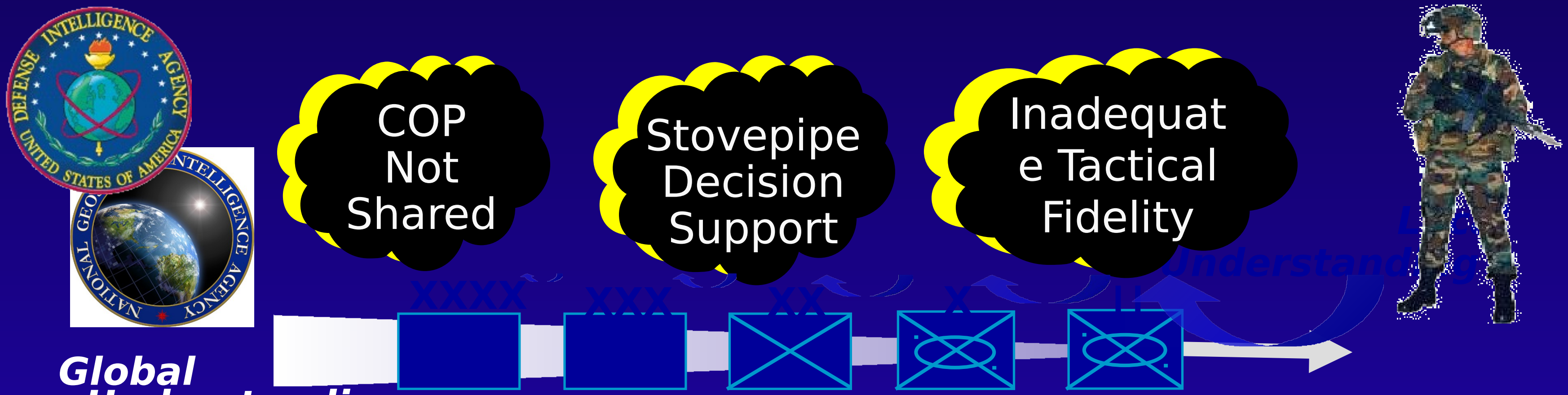
Diminish the *Drivers of Conflict:*

- **Impunity**
- **Injustice**
- **Criminalization of State Institutions**

Strengthen *Institutional Capability:*

- **Public Safety and Law Enforcement**
- **Administration of Justice**
- **Respect for Human Rights**
- **Equality Before the Law**
- **Societal Support for Rule of Law**

Urban Reasoning & Battlespace ANalysi

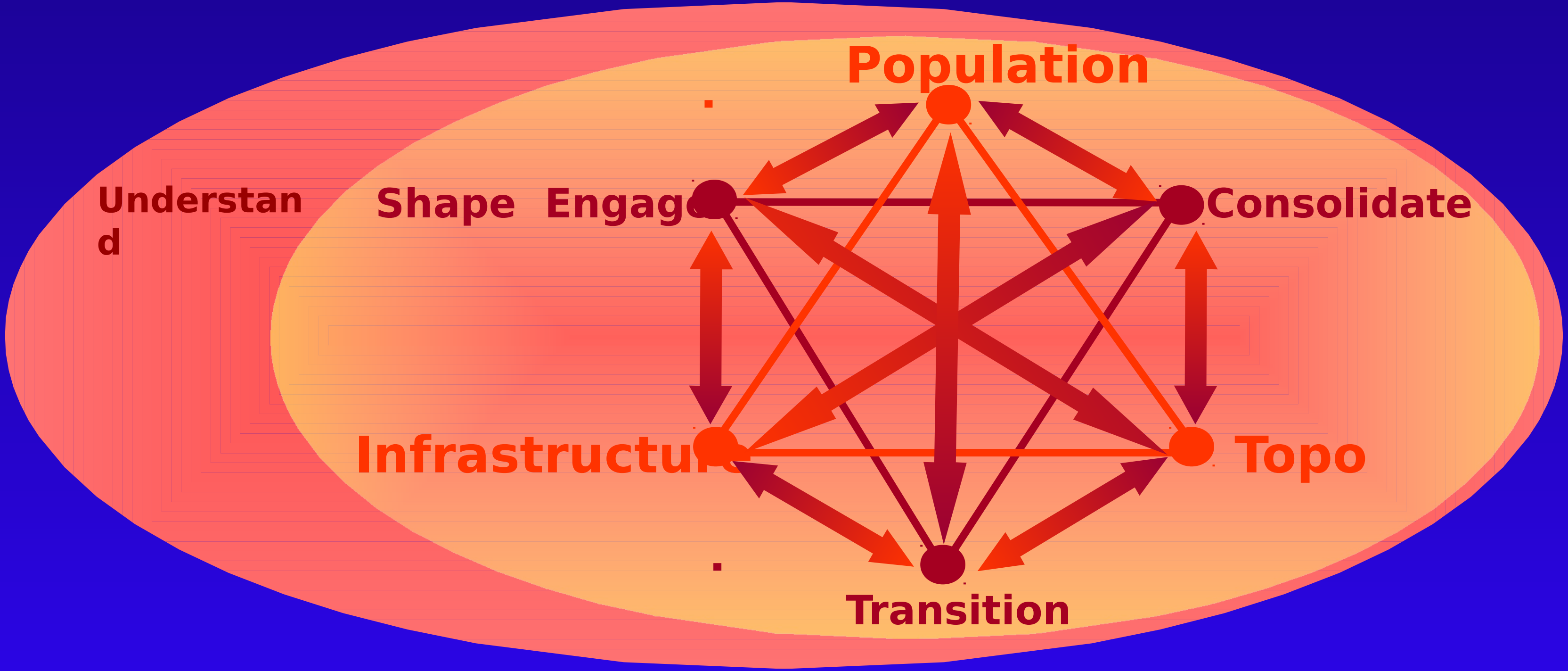

XXXX
XXX
XX
X
II
Understanding

COP Not Shared

Stovepipe Decision Support

Inadequate Tactical Fidelity

Global Understanding



Understand

Shape

Engage

Population

Consolidate

Infrastructure

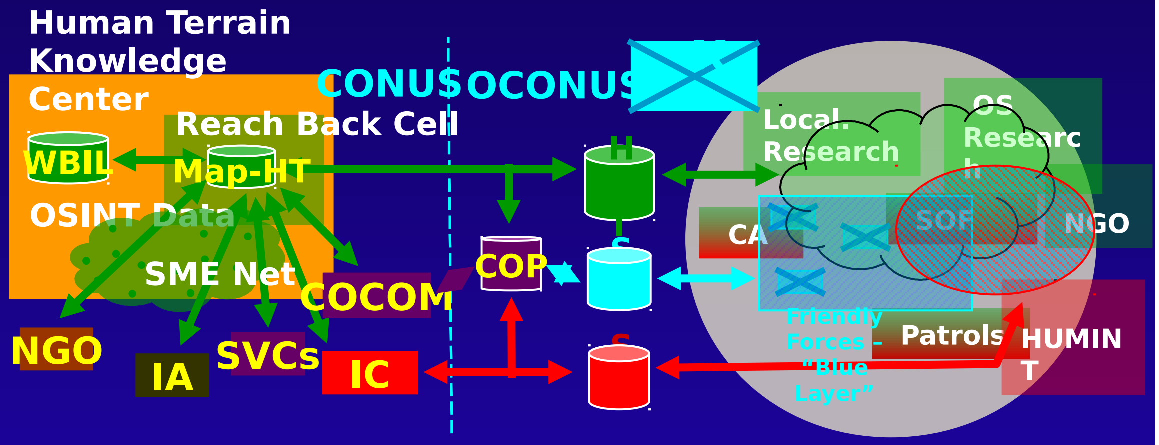
Topo

Transition

egional Stability

$M

MAPPING THE HUMAN TERRAIN (MAP-HT) J/ACTD


Human Terrain Knowledge Center
CONUS
OCONUS
Reach Back Cell
WBIL
Map-HT
OSINT Data
SME Net
COCOM
COP
NGO
IA
SVCs
IC
H
S
S
Local Research
OS Research
CA
SOF
NGO
Friendly Forces - "Blue Layer"
Patrols
HUMINT

Objectives

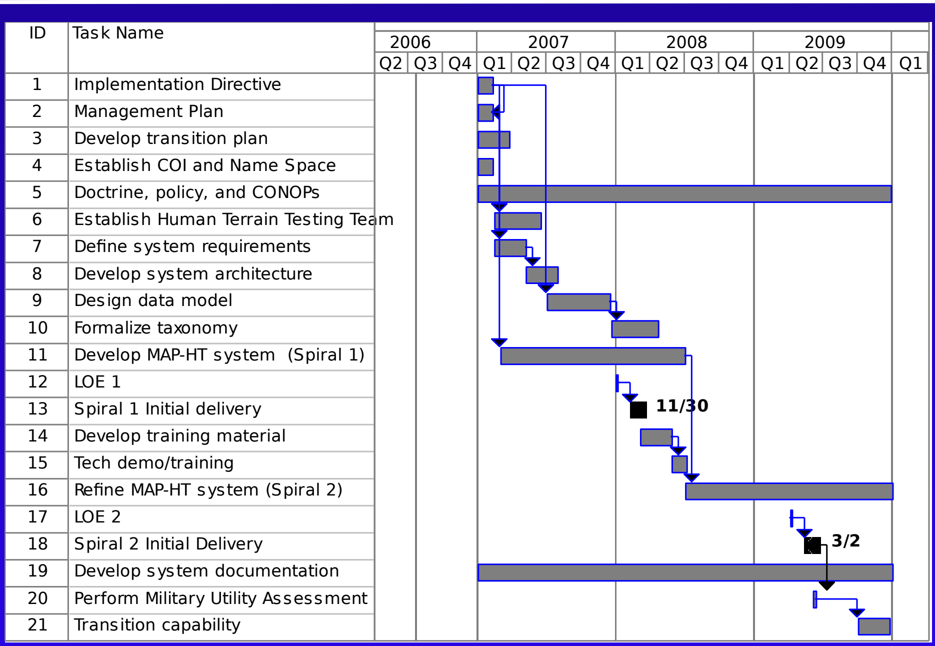
- Provide a joint common relevant picture of the human terrain for use by: Tactical elements, Operational commanders, Theater planners, Interagency, Coalition partners
- Provide means for commanders to use human terrain as an element of combat power.
- Establish direct cultural support to BCT/RCT commanders and interagency end-users
- Stand up human terrain capability based on Cultural Preparation of the Environment (CPE)
- Provide means for human terrain collection and dissemination
- Provide human terrain baseline information and toolkit to Commander and other end-users

Technology

- Baseline schema of socio-cultural structure
- Geographic Information Systems
- Link Analysis
- Knowledge Discovery
- Advanced Visualization, Modeling and Analysis

MAP-HT Team

- Lead Service: US Army
- User Sponsor and OM: USCENTCOM
- Technical Manager: US Army ERDC-TEC
- Technical Agents: FMSO, USMC TECOM, USSOCOM
- Transition Manager: USSOCOM SOAL PEO IIS, DCGS

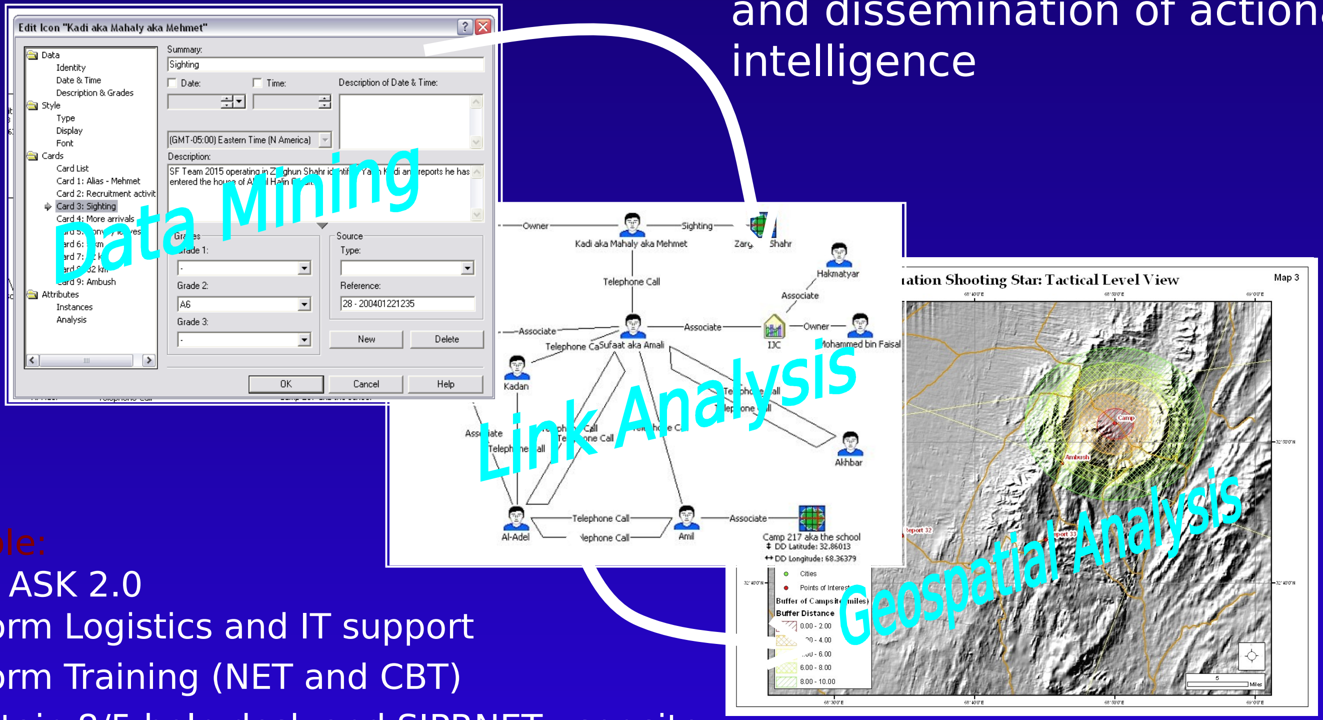


ID	Task Name
1	Implementation Directive
2	Management Plan
3	Develop transition plan
4	Establish COI and Name Space
5	Doctrine, policy, and CONOPs
6	Establish Human Terrain Testing Team
7	Define system requirements
8	Develop system architecture
9	Design data model
10	Formalize taxonomy
11	Develop MAP-HT system (Spiral 1)
12	LOE 1
13	Spiral 1 Initial delivery
14	Develop training material
15	Tech demo/training
16	Refine MAP-HT system (Spiral 2)
17	LOE 2
18	Spiral 2 Initial Delivery
19	Develop system documentation
20	Perform Military Utility Assessment
21	Transition capability

Asymmetrical Software Kit (ASK)

Predictive Analysis Capabilities for USASOC

Objective: Tool kit for collection, analysis, and dissemination of actionable geospatial intelligence


Data Mining
Link Analysis
Geospatial Analysis
Edit Icon "Kadi aka Mahaly aka Mehmet"
Data
Identity
Date & Time
Description & Grades
Style
Type
Display
Font
Cards
Card List
Card 1: Alias - Mehmet
Card 2: Recruitment activit
Card 3: Sighting
Card 4: More arrivals
Card 9: Ambush
Attributes
Instances
Analysis
Summary:
Sighting
Date:
Time:
Description of Date & Time:
(GMT-05:00) Eastern Time (N America)
Description:
Grade 1:
Grade 2:
A6
Grade 3:
Source
Type:
Reference:
28 - 200401221235
New
Delete
OK
Cancel
Help
Owner
Sighting
Kadi aka Mahaly aka Mehmet
Shahr
Hakmatyar
Telephone Call
Associate
Sufaat aka Amali
Owner
IJC
Mohammed bin Faisal
Kadan
Akhbar
Al-Adel
Amil
Camp 217 aka the school
DD Latitude: 32.86013
DD Longitude: 68.36379
ation Shooting Star: Tactical Level View
Map 3
Camp
Ambush
Cities
Points of Interest
Buffer of Camps (miles)
Buffer Distance
0.00 - 2.00
6.00 - 8.00
8.00 - 10.00
Miles

TEC Role:

- Field ASK 2.0
- Perform Logistics and IT support
- Perform Training (NET and CBT)
- Maintain 8/5 help desk and SIPRNET user site
- Manage SW/HW maintenance

Status:

- Deployed to all SF ODA, OBD, FOB, and SFOB
- Deployed to 96th CA BN and reserves
- Integrated into CA School

Overseas Humanitarian Assistance Shared Information System (OHASIS)

Objective: Use GIS enterprise information technology for Humanitarian Assistance project management

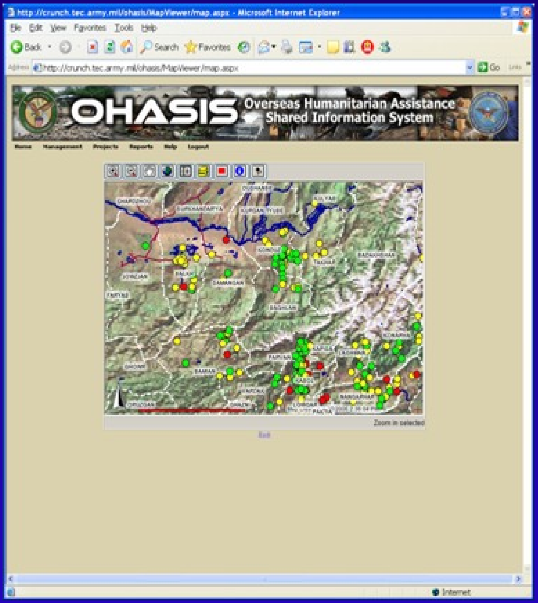
Spirals

1: Focused on establishing foundation
- Streamlined data entry and automated reporting
- Structured data input with spatial reference
- Single point of entry
- Cleaned up legacy data and ported to OHASIS
- Designed and implemented initial web mapping site
- Started the training process

2: Deploy capability to DSCA, all COCOMs, and USACAPOC

3: SIPRNET

OHASIS Team
- Oversight Agency: DSCA
- User Sponsor: USCENTCOM
- Collaborating Command: USACAPOC
- Technical Manager: US Army ERDC-TEC
- Industry: BCS


http://crunch.tec.army.mil/ohasis/MapViewer/map.aspx - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://crunch.tec.army.mil/ohasis/MapViewer/map.aspx
Go Links
OHASIS Overseas Humanitarian Assistance Shared Information System
Home Management Projects Reports Help Logout
Internet

Trimble
GPS

Stryker Brigade Combat Team Geospatial Database (SBCT)

Problem:

1st/25th Stryker Brigade asked for assistance in managing Brigade collected spatial and temporal data for their AOI

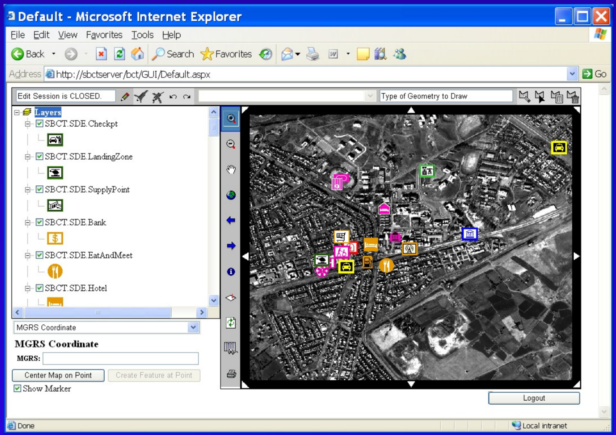
Data collection performed by soldiers as part of routine missions to answer Commanders Priority Information Requirements

Collected data difficult to maintain, share, or visualize

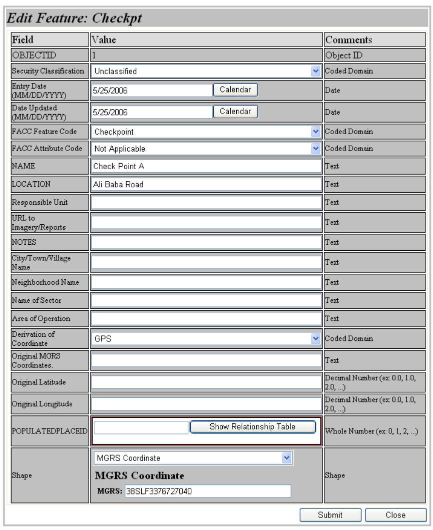
Capabilities:

- Standards compliant data model
- Use geodatabase coded and range domain
- Web-based, multi-user environment
- Create point, line and polygon features
- Attribute features with dynamic pick lists
- Interactively view feature and attributes or map and image background
- Select edit layer dynamically
- Store, query, and edit features in enterpris geodatabase

Server-Based Geoprocessing


Default - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://sbctserver/bct/GUI/Default.aspx Go
Edit Session is CLOSED.
Type of Geometry to Draw
Layers
SBCT.SDE.Checkpt
SBCT.SDE.LandingZone
SBCT.SDE.SupplyPoint
SBCT.SDE.Bank
SBCT.SDE.EatAndMeet
SBCT.SDE.Hotel
MGRS Coordinate
MGRS Coordinate
MGRS:
Center Map on Point
Create Feature at Point
Show Marker
Logout
Done
Local intranet

Data Modeling

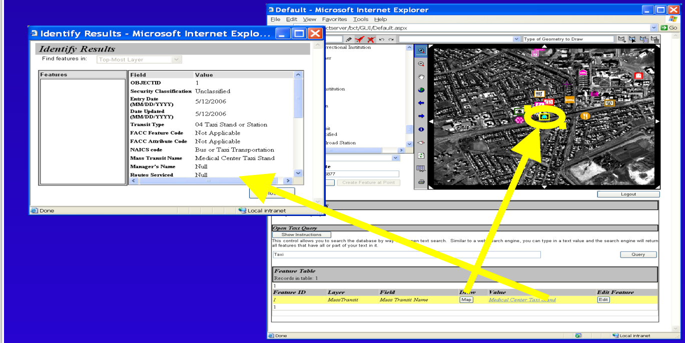


Edit Feature: Checkpt

Field	Value	Comments
OBJECTID	1	Object ID
Security Classification	Unclassified	Coded Domain
Entry Date (MM/DD/YYYY)	5/25/2006	Date
Date Updated (MM/DD/YYYY)	5/25/2006	Date
FACC Feature Code	Checkpoint	Coded Domain
FACC Attribute Code	Not Applicable	Coded Domain
NAME	Check Point A	Text
LOCATION	Ali Baba Road	Text
Responsible Unit		Text
URL to Imagery/Reports		Text
NOTES		Text
City/Town/Village Name		Text
Neighborhood Name		Text
Name of Sector		Text
Area of Operation		Text
Derivation of Coordinate	GPS	Coded Domain
Original MGRS Coordinates.		Text
Original Latitude		Decimal Number (ex: 0.0, 1.0, 2.0, ...)
Original Longitude		Decimal Number (ex: 0.0, 1.0, 2.0, ...)
POPULATEDPLACEID		Whole Number (ex: 0, 1, 2, ...)
Shape	MGRS Coordinate **MGRS Coordinate** **MGRS:** 38SLF3376727040	Shape

Calendar
Show Relationship Table
Submit
Close

Text Query and Mapping



Identify Results

Find features in: Top-Most Layer

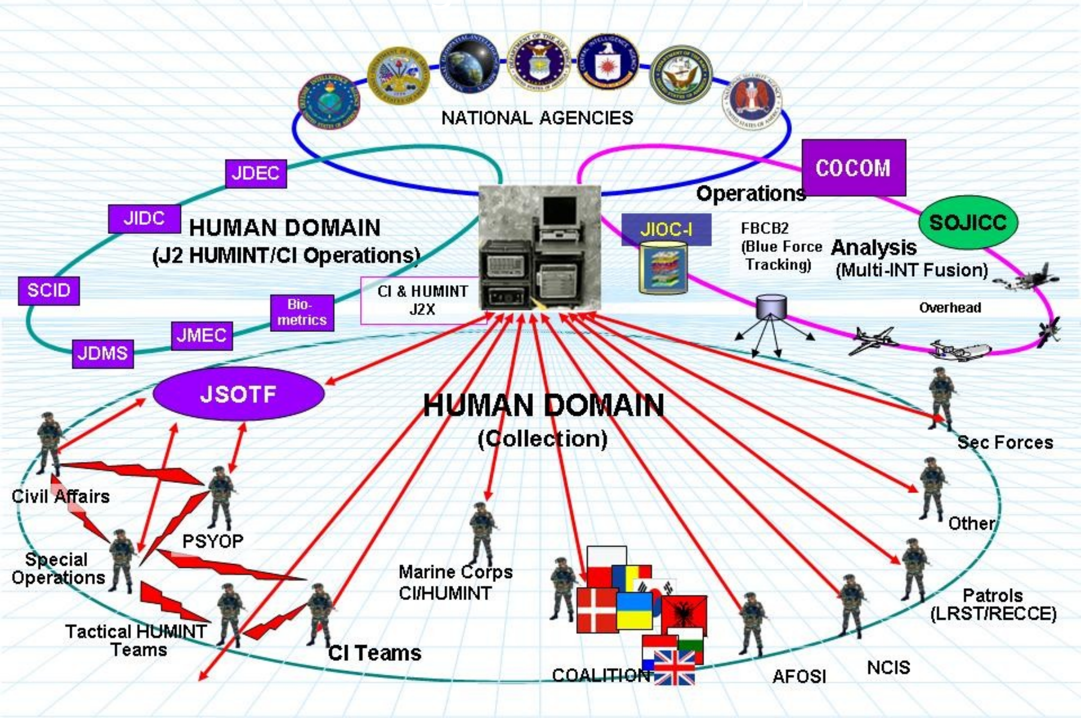
Field	Value
OBJECTID	1
Security Classification	Unclassified
Entry Date (MM/DD/YYYY)	5/12/2006
Date Updated (MM/DD/YYYY)	5/12/2006
Transit Type	04 Taxi Stand or Station
FACC Feature Code	Not Applicable
FACC Attribute Code	Not Applicable
NAICS code	Bus or Taxi Transportation
Mass Transit Name	Medical Center Taxi Stand
Manager's Name	Null
Routes Serviced	Null

Identify Results - Microsoft Internet Explo...
Features
Done
Local intranet
Default - Microsoft Internet Explorer
Open Text Query
Show Instructions
Taxi
Query
Feature Table
Records in table: 1
Logout

Counter-Intelligence Human Intelligence Advanced Modernization Program / Interoperability Operations Now (CHAMPION)

Joint, network-centric, geospatially collaborative knowledge base facilitating:

- “Human data” collection, synchronization, and source vetting
- Multi-echelon distributed access, alerts and notifications
- Data archiving at National repositories


NATIONAL AGENCIES
JDEC
COCOM
Operations
JIDC
HUMAN DOMAIN
(J2 HUMINT/CI Operations)
JIOC-I
FBCB2
(Blue Force
Tracking)
SOJICC
Analysis
(Multi-INT Fusion)
SCID
CI & HUMINT
J2X
Bio-
metrics
Overhead
JMEC
JDMS
JSOTF
HUMAN DOMAIN
(Collection)
Sec Forces
Civil Affairs
PSYOP
Other
Special
Operations
Marine Corps
CI/HUMINT
Patrols
(LRST/RECCE)
Tactical HUMINT
Teams
CI Teams
COALITION
AFOSI
NCIS

Essential Elements

- Normalize structured data elements
- Add structure to unstructured data
- Enable Federated Search across stovepipe systems
- Extend Network to Warfighters via RF Bridge

83 R&D Civilian Volunteers Have Deployed to OEF/OIF for 120 days or more and 205 to Hurricanes Katrina and Rita

IRAQ
WELCOMES.
CPT Sam Hunter
WARNING
THE BORDER OF IRAQ

Questions
?